



Calhoun: The NPS Institutional Archive
DSpace Repository

Theses and Dissertations

Thesis and Dissertation Collection

1994-03

Costs to ship fresh fruits and vegetables from
Defense Subsistence Office, Alameda via
controlled atmosphere containers

Brenner, Gerard F.

Monterey, California. Naval Postgraduate School

<http://hdl.handle.net/10945/30878>

Downloaded from NPS Archive: Calhoun



Calhoun is a project of the Dudley Knox Library at NPS, furthering the precepts and goals of open government and government transparency. All information contained herein has been approved for release by the NPS Public Affairs Officer.

Dudley Knox Library / Naval Postgraduate School
411 Dyer Road / 1 University Circle
Monterey, California USA 93943

<http://www.nps.edu/library>

NAVAL POSTGRADUATE SCHOOL

Monterey, California



THESIS

COSTS TO SHIP FRESH FRUITS AND VEGETABLES
FROM DEFENSE SUBSISTENCE OFFICE, ALAMEDA
VIA CONTROLLED ATMOSPHERE CONTAINERS

by

Gerard F. Brenner

March, 1994

Principal Advisor:
Associate Advisor:

Dan C. Boger
William Gates

Approved for public release; distribution is unlimited

Thesis
B80344

DUDLEY KNOX LIBRARY
NAVAL POSTGRADUATE SCHOOL
MONTEREY CA 93943-5101

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Service, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE March 1994		3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE COSTS TO SHIP FRESH FRUITS AND VEGETABLES FROM DEFENSE SUBSISTENCE OFFICE, ALAMEDA VIA CONTROLLED ATMOSPHERE CONTAINERS				5. FUNDING NUMBERS	
6. AUTHOR(S) Brenner, Gerard F.					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.					
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.				12b. DISTRIBUTION CODE A	
13. ABSTRACT (Maximum 200 words) This thesis involves determining the cost of shipping Fresh Fruits and Vegetables (FFV) from the Defense Subsistence Office (DSO), Alameda, to various customers on the Pacific Rim via controlled atmosphere refrigerated containers. The data was developed via interviews with personnel at various commands, particularly DSO Alameda, Defense Subsistence Region, Pacific (DSRPAC), Military Traffic Management Command, Western Area (MTMCWA), Military Sealift Command, Pacific (MSCPA), and Military Sealift Command Headquarters (MSCHQ). The thesis shows the processes involved in booking the shipment of FFV, manifesting them, and final billing of the customers. The entire process has never been documented. Understanding the process may suggest improvements. Additionally, showing actual costs will provide the data necessary for DSO Alameda's customers to plan their budgets, a critical factor in this time of shrinking defense budgets.					
14. SUBJECT TERMS TRANSPORTATION: CONTROLLED ATMOSPHERE VANS: DSRPAC: DSO ALAMEDA				15. NUMBER OF PAGES 109	
				16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED		18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED		19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	
				20. LIMITATION OF ABSTRACT UL	

Approved for public release; distribution is unlimited.

Costs to Ship Fresh Fruits and Vegetables From Defense
Subsistence Office, Alameda Via
Controlled Atmosphere Containers

by

Gerard Francis Brenner
Lieutenant Commander, Supply Corps, United States Navy
B.S., Rensselaer Polytechnic Institute

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
March 1994

Author:

Gerard Francis Brenner

Approved By:

Daniel Boger, Principal Advisor

William Gates, Associate Advisor

David R. Whipple, Chairman
Department of Systems Management

ABSTRACT

This thesis involves determining the cost of shipping Fresh Fruits and Vegetables (FFV) from the Defense Subsistence Office (DSO), Alameda, to various customers on the Pacific Rim via controlled atmosphere refrigerated containers. The data was developed via interviews with personnel at various commands, particularly DSO Alameda, Defense Subsistence Region, Pacific (DSRPAC), Military Traffic Management Command, Western Area (MTMCWA), Military Sealift Command, Pacific (MSCPAC), and Military Sealift Command, Headquarters (MSCHQ). The thesis shows the processes involved in booking the shipment of FFV, manifesting them, and final billing of the customers. The entire process has never been documented. Understanding the process may suggest improvements. Additionally, showing actual costs will provide the data necessary for DSO Alameda's customers to plan their budgets, a critical factor in this time of shrinking defense budgets.

TK0313
380344
C.2

TABLE OF CONTENTS

I.	INTRODUCTION	1
A.	DSO'S ORGANIZATIONAL RELATIONSHIPS	1
B.	PROBLEM BACKGROUND	3
C.	SERVICE IMPROVEMENT	6
D.	A NEW SOLUTION	8
E.	MEASURES OF SUCCESS	10
F.	DETERMINING COSTS	12
II.	INFORMATION FLOWS IN THE SHIPPING PROCESS	15
III.	COSTS AND BILLING	29
A.	THE CARRIER	30
B.	MTMC	33
1.	DBOF	33
2.	Computation of MTMCWA Port Handling Billing Rates	35
C.	MSC	42
1.	MSC Rate Development	43
2.	Computation of MSC Container Billing Rates	44
D.	PROPOSED ALGORITHM	47
1.	Payment to Ocean Carrier	47
2.	MTMC Surcharge	48
3.	MSC Billing	48

IV.	TEST CASE	49
A.	FIRST ATTEMPT	49
B.	SECOND ATTEMPT	50
V.	CONCLUSIONS AND RECOMMENDATIONS	56
A.	CONCLUSIONS	56
B.	RECOMMENDATIONS	58
	LIST OF REFERENCES	60
	APPENDIX A	64
	APPENDIX B	65
	APPENDIX C	66
	APPENDIX D	67
	APPENDIX E	75
	APPENDIX F	77
	APPENDIX G	80
	APPENDIX H	83
	APPENDIX I	86
	APPENDIX J	87
	APPENDIX K	88
	APPENDIX L	89
	APPENDIX M	90
	APPENDIX N	91
	APPENDIX O	96

APPENDIX P	97
APPENDIX Q	99

I. INTRODUCTION

A revolutionary method of shipping fresh fruits and vegetables (FFV) to overseas customers was developed at the Defense Subsistence Office (DSO) Alameda. This method involves shipping FFV in controlled atmosphere vans. The method was spearheaded by Lieutenant Commander James Kerber, Supply Corps, U.S. Navy, the Chief of DSO Alameda. It was the result of coordinating the efforts of both the civilian and military communities involved in the business of shipping FFV.

The method works well, providing a high quality product. It has introduced numerous efficiencies to FFV shipments between Oakland, California, and various locations on the Pacific Rim. It has reduced DSO Alameda's dependence on air shipments for overseas movement of FFV. The difficulty has been in assessing the method's relative cost, and whether it has provided savings over air shipment. In order to discuss the problem, and why the controlled atmosphere method was developed in the first place, DSO Alameda's organizational relationships must be examined.

A. DSO ALAMEDA'S ORGANIZATIONAL RELATIONSHIPS

The Defense Logistics Agency (DLA) is the branch of the Department of Defense (DoD) providing coordinated logistics

support to DoD components, Federal agencies, and other organizations as assigned. Coordinated logistics includes procuring designated commodities. [Ref 1] DLA has six supply centers. Each specializes in managing certain assigned categories of material. [Ref 2:p. 5] The supply center with which this thesis is specifically concerned is the Defense Personnel Supply Center (DPSC).

DPSC is located in Philadelphia, Pennsylvania. DPSC buys and manages food, clothing and medical supplies. [Ref 2:p. 15] DPSC is divided into four directories: Medical, Clothing, Textiles, and Subsistence. All food items fall under Subsistence. The Subsistence Directorate is further subdivided into Semi-Perishable, which handles dry and canned goods, and Perishable, which is all freeze and chill items. FFV is a Perishable. [Ref 3]

Perishable items are handled by the Defense Subsistence Regions, each of which is assigned several Defense Subsistence Offices (DSOs). Defense Subsistence Region Atlantic (DSRLANT) is assigned seventeen DSOs, Defense Subsistence Region Europe (DSRE) has five DSOs, and Defense Subsistence Region Pacific (DSRPAC) also has five DSOs. These organizational relationships are summarized in Figure 1. Of the twenty-seven DSOs, DSO Alameda is the largest. [Ref 3]

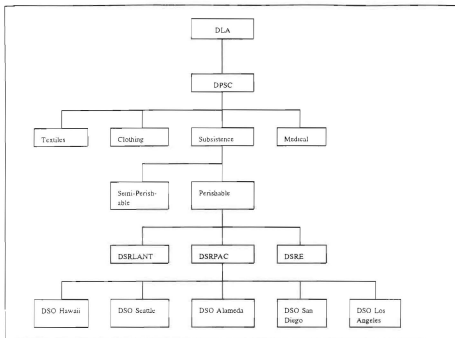


Figure 1 DSO Alameda Organizational Relationships

B. PROBLEM BACKGROUND

Any Federal agency can purchase from a DSO. DSO customers tend to be the Defense Commissary Agency (DeCA) and DoD components, although current customers include Veteran's Administration hospitals, Indian reservations and Federal prisons. Only one of DSRPAC's DSOs, DSO Alameda, exports perishables. DSO Alameda's service area includes Nevada, Oregon, part of California, and the entire Pacific Rim. DeCA currently accounts for approximately 70% of DSO Alameda's sales in terms

of both dollars¹ and volume². The DoD components which DSO Alameda services are generally troop customers - ships, camps and bases. [Ref 3]

One problem that arises because of the diversity of customers is a similar diversity of requirements. This situation has been exacerbated by DeCA's creation. Previously, commissaries were under the control of individual base commanders. Under DeCA, all commissaries speak with one voice. For DeCA, the key word for their products is marketability. Thus, DeCA may require brand names. For example, a ship ordering frozen turkeys would receive a generic product, while DeCA might specifically order a brand name such as Butterball. [Ref 3]

The need for marketability poses a problem for DPSC. DeCA does not have to buy from DPSC and in fact is now buying from major distributors. DeCA turned away from DPSC because of inconsistencies and late deliveries. Customers (the individual commissaries) didn't know what they would get, or when, or the product's quality. [Ref 3]

Subsistence also suffered from long Order and Shipping Times (OST). This was due in part to consolidation problems.

¹Last year DeCA purchased approximately \$110,000,000 worth of food from various DPSC activities. [Ref 3]

²Volume is measured in terms of Measurement Tons (MTON). [Ref 3] A MTON is defined as 40 cubic feet. [Ref 4:p. 8] This is considered the maximum cube of a fully loaded standard pallet. A standard pallet is 40" x 48" x 7". [Ref 5]

For example, Naval Supply Depot (NSD) Yokosuka would consolidate their customers' orders and send the consolidated order to DPSC. DPSC would then consolidate all orders for customers located in Japan. DPSC would arrange for shipping and then would order DSO Alameda to release the material. [Ref 3]

Another example of the OST problem was FFV for the commissaries in Guam. The commissaries would place their order with NSD Guam, who then gave a consolidated order to DSO Alameda. DSO Alameda had a time limit to get the FFV to NSD Guam, who then had a certain amount of time to get it to the secondary (final) customer. The end result was an OST of 90 to 120 days for the commissaries. DeCA found this unsatisfactory, and told DPSC they wanted OST lowered to 45 days. [Ref 3]

The DSOs do not control most of the items in their warehouses. The DSO Chief is not the accountable officer. The item managers and accountable officers are located at DPSC in Philadelphia. They decide inventory balance. DPSC sends issue documents to the DSOs and books seavans. DPSC control extends to the point that they tell the DSOs to issue specific lot numbers of a particular item. The only item which Lieutenant Commander Kerber had exclusive control over as Chief of DSO Alameda was FFV. [Ref 3]

C. SERVICE IMPROVEMENT

As stated above, Lieutenant Commander Kerber had exclusive control over FFV. The FFV buyers worked for him, and he arranged to ship the FFV. Buyers purchased FFV on a daily basis, and the FFV was shipped either directly to the customer or to the DSO Alameda warehouse to await further transshipment. Lieutenant Commander Kerber wanted to improve customer service and satisfaction. Since it was the only item he had complete control over, Lieutenant Commander Kerber decided to attack the OST problem for FFV. [Ref 3]

One immediately identified problem was the delays caused by consolidating orders. Everywhere feasible, unnecessary distribution points were removed. DSO Alameda started dealing directly with the final customer. Instead of sending orders to a consolidation/distribution point, the customers faxed their orders directly to DSO Alameda. This reduced both OST and the amount of handling required. [Ref 3]

Lieutenant Commander Kerber contacted the Air Mobility Command (AMC), Military Sealift Command (MSC), and Military Transportation Management Command (MTMC) to find out about shipping options and the possibilities of improving the shipping process. He felt they had no real desire to change the status quo, nor was there sufficient technical expertise to come up with new techniques. [Ref 3]

Lieutenant Commander Kerber decided to forge ahead on his own. He decided to use air shipment, since it was considerably faster than surface shipment. He discovered that it was cheaper to use freight forwarders and commercial air carriers than to use AMC. This included all ancillary services, such as triwalls for the FFV and ice to preserve it. [Ref 3]

Lieutenant Commander Kerber let contracts directly with the freight forwarders. He later discovered that this was inappropriate. Such contracts were under AMC's cognizance. However, when AMC found out, there was sufficient empirical data to show that it was cheaper and faster to use commercial vice AMC assets. As a result, the commercial contracts remained in place. AMC merely took over contract administration for DSO Alameda. [Ref 3]

With commercial air shipment, OST dropped to 30 days. In some cases it dropped to between seven and ten days. FFV quality went up. Customers started requesting all their FFV be air shipped. As a result, FFV weight levels being air shipped tripled. Since the commissaries were still under the base commanders' control, the base commanders covered the air shipment costs using their operating funds. The high quality of the FFV promoted high troop morale, justifying the additional expense. [Ref 3]

In October 1991, DeCA officially took over the commissaries. DeCA did not know that so much FFV was being air

shipped. Air shipment was extremely expensive.³ The new organization did not have sufficient funding to airlift all FFV. As a result, DeCA imposed limits on the amount of FFV that could be airlifted to each country. [Ref 3]

D. A NEW SOLUTION

Lieutenant Commander Kerber started looking for cheaper alternatives to air shipment. He looked for expertise outside of DoD, in academia and business. One source was the University of California, Davis (UC Davis). Specifically, UC Davis has Post Harvest Bio-Technology, an agricultural graduate discipline focused on improving FFV transportation and shelf life. [Ref 3]

From private industry, Lieutenant Commander Kerber learned of controlled atmosphere vans. All FFV breathes. In effect, FFV behaves like living organisms. The idea of controlled atmosphere is to put the FFV 'to sleep,' to put it in suspended animation. If you slow the respiration of the FFV, you slow the maturing process. Industry had developed three types of controlled atmosphere vans. The least precise was the Fresh Air Exchange Method, which basically used air ports in a refrigerated van. Next was the Modified Atmosphere Van. In this method, the van is sealed. Hoses draw off the atmosphere

³For example, at that time it cost \$1.15 per pound gross weight to air ship to Guam. The cost of the ice alone was high. [Ref 3]

and replace it with a new atmosphere. The most precise is the Controlled Atmosphere Van, in which a computer monitors and adjusts the atmosphere as necessary. In all cases, the vans are refrigeration vans, since temperature is the driving force for FFV. [Ref 3]

Lieutenant Commander Kerber decided to put together a Process Action Team (PAT) to find a way to successfully ship FFV via surface modes. The PAT was composed of Army veterinarians, a representative from American President Lines (APL), scientists from UC Davis, and representatives of the Transfresh Company, which specializes in controlled atmosphere vans. [Ref 3]

The PAT brought together controlled atmosphere vans and the knowledge that certain fruits and vegetables were compatible with one another, while others were incompatible. All FFV breathes, but not the same gases. For example, some breathe out ethylene gas, which is a natural ripening hormone. Some breathe in ethylene gas. They also give off different gases during decay and require different temperatures for ideal preservation. By putting the right FFV combinations together, the PAT improved shelf life control. The PAT developed eight categories of temperature/gas compatibility. These 'correct' combinations are then put in the controlled atmosphere vans, whose computer controls temperature and gas mixtures. Even gas flow patterns were discovered to make a difference, with

bottom air flow being superior to top air flow. In addition, the PAT learned that pre-cooling improved the product. This involves cooling the core of the FFV before loading it in the vans. If the process is done correctly, FFV shelf life can be roughly doubled. For example, the shelf life of lettuce was extended from 11 - 15 days to 28 - 30 days. [Ref 3]

FFV was first shipped using the controlled atmosphere/temperature system in December 1992. The pilot program to Guam was "hugely successful." The system is considered to be out of the test stage. Over three million pounds of FFV have been shipped to Guam. [Ref 3]

E. MEASURES OF SUCCESS

The goal was to migrate as much product as possible from air to surface shipment. For the new method to be a success, Lieutenant Commander Kerber felt five criteria had to be met:

1. The condition of the product upon delivery to the customer relative to prior surface shipment had to go up.
2. OST relative to prior surface shipment had to go down.
3. Required Delivery Dates (RDDs) had to be met.
4. Predictability of shipment arrival had to improve.
5. Cost had to go down.

The first measure of success of the system is based on the amount of spoilage. Airlifting FFV results in loss of over five percent of the FFV. The controlled atmosphere/temper-

ature system is consistently showing losses of under five percent. Even in a case where the customer checked spoilage one week after receipt, losses were under five percent. [Ref 3]

Measures two through four are intertwined. As previously stated, DPSC and the distribution points were eliminated from the loop. Directly dealing with the customer streamlined the process and speeded data flow. In addition, it allowed DSO Alameda to develop its own data base for each of the customers. Weekly demand was determined, and a baseline computed for each customer. This was necessary to determine the approximate number of controlled atmosphere vans needed, and to prevent rollover (overbooking). Customers initially feared this. They were afraid items would be pushed to them, where they wanted to pull material.⁴ The fear was overcome by showing the customers that the baseline was a template, allowing them to consistently obtain the amounts and types of FFV which they required. Only changes to the template needed to be sent to DSO Alameda, vice sending a complete new order every time. This cut back on paperwork and errors. [Ref 3]

The process changes reduced OST for surface shipment to Guam from 90 - 120 days to 19 - 21 days. After six months of the new process, OST dropped to 17 - 21 days. RDD was

⁴Pushing material means the wholesale level determines how much material the retail level needs and sends that amount to them. Pulling material means the retail level determines its needs and orders the appropriate amounts from the wholesale level. [Ref 6]

achieved every week in that six months except for four weeks.⁵ [Ref 3]

The predictability of shipments allows DSO Alameda to expand their range and depth of customers. Those with small refrigerated storage areas, who previously had to depend on a larger organization, could now order direct because FFV could be treated as Just-In-Time (JIT) material. [Ref 3]

F. DETERMINING COSTS

The last measure of success was the cost of the new process. Common sense would imply that using surface shipment vice air shipment should save shipping costs. Unfortunately, DSO Alameda was unable to calculate the savings because they could not determine the cost of shipping FFV by surface container. Without knowing the cost, DSO Alameda was unable to determine the savings. [Ref 3]

After twenty-four shipments had been made using the controlled atmosphere/temperature system, DSO Alameda attempted to calculate how much was being saved by using surface shipment. The case DSO Alameda examined was the amount of savings for FFV shipped to Guam. Using fully cubed out vans (thus minimizing the number of vans you need to ship), and using the most conservative estimates, DSO Alameda calculated annual

⁵One of those four weeks occurred when a typhoon hit Guam. Despite the typhoon, delivery was only three days after RDD. [Ref 3]

savings of \$650,000 over air shipment. This estimate was considered very conservative and very "squishy." [Ref 3]

DSO Alameda's difficulty was in determining what the rates were. Through inquiries, Lieutenant Commander Kerber determined American President Lines' (APL's) rate for shipping a 40' container to Guam was \$7,000.⁶ Unfortunately, as in the case of air shipment, DSO Alameda does not contract directly with a carrier. MSC and MTMC act as the Contracting Officer Technical Representatives (COTRs) for shipping material by surface modes. MSC lets the contracts with commercial ocean carriers. MTMC does the booking, while MSC does the billing. Both organizations add their surcharges to the cost of shipping material. It proved impossible to determine rates by comparing final invoices, because each command identifies material differently. [Ref 3]

DSO Alameda deals directly with area commands, including MTMC Western Area (MTMCWA) and MSC Pacific (MSCPAC). The rates Lieutenant Commander Kerber obtained from MTMCWA and MSCPAC seemed to indicate a charge of \$14,000 per container, twice APL's published rate for vans shipped on APL ships. Is the extra \$7,000 all surcharges? If so, why are the surcharges so high? DSO Alameda and DSRPAC wondered what value MSCPAC and MTMCWA added to the process. Additionally, there were

⁶APL did not specify if this was for all containers, or for controlled atmosphere containers only. [Ref 3]

indications MSCPAC seemed to be paying APL only \$3,500 per controlled atmosphere container. Could the surcharges in fact be even higher? DSO Alameda expressed frustration, and Lieutenant Commander Kerber admitted no one at his organization could make heads or tails of the costs for shipping vans. [Ref 3]

DSO Alameda and DSRPAC proposed this thesis topic in order to discover the answers to their questions. This thesis' primary research question is: What is the cost to DSO Alameda's customers to ship FFV by controlled atmosphere container overseas? Subsidiary questions are:

1. How does MSC and MTMC determine rates for shipping material by container?
2. How much are MSC's and MTMC's surcharges and how are they computed?
3. How is billing handled?
4. Who actually foots the bill? Lieutenant Commander Kerber believed that in multi-customer shipments, billing might not be allocated to the appropriate customer, with the result that MSC and MTMC were either overbilling or underbilling customers. [Ref 3]

The research into these questions and the results of that research are presented in the following chapters.

II. INFORMATION FLOWS IN THE SHIPPING PROCESS

The process of shipping FFV from DSO Alameda to various customers on the Pacific Rim involves a number of computer systems and documents. None of the computer systems currently interface. The physical movement of the FFV is probably the simplest part of the entire process.

The process starts with DSO Alameda. DSO Alameda requests a booking from MTMCWA via DSRPAC.⁷ [Ref 7] DSRPAC requests the booking of the FFV through the Mechanized Export Traffic System (METS) computer system. MTMCWA receives the data and arranges the booking. [Ref 8]

The booking is done by the Ocean Cargo Clearance Authority (OCCA) Branch of MTMCWA. [Ref 9] The OCCA bookers try to arrange the cheapest possible rates for their customers. (This is the "Transportation Management" in MTMC's name.) [Ref 8]

There are three distinct phases of the shipping process handled by MTMCWA, and each has its own computer system. Traffic management is the first phase and is handled by MTMCWA. It is concerned with arranging bookings. It uses the METS computer system and its subsystem the Automatic Carrier

⁷A booking is the act of making an arrangement for the movement of goods or persons. It can be the reservation of space aboard a vessel, an airplane reservation, or the calling for a motor movement. [Ref 6:p. 33]

Interface (ACI). Terminal operations for the Oakland Army Terminal, the second phase of the process, are handled by one of MTMCWA's subordinate commands, the 1302nd Major Port Command. Terminal operations is concerned with physically moving cargo. It uses TERMS (Terminal Management System) and the TERMS On Line System (TOLS). The third phase of the process is the Financial Management System (FMS). This is handled by MTMCWA. [Ref 10] For FFV, FMS sets rates; it does not involve billing.

ACI ties MTMCWA in with the carrier. MTMC makes an offer for a booking with a carrier via ACI. The booking is confirmed via ACI, which is the ACI Release. The ACI Release contains the commercial voyage number and commercial booking number. [Ref 8]

The document which METS generates contains all the data and is known as the Release Unit Data Input (RUDI). The RUDI contains the shipping arrangements, Transportation Control Number (TCN),⁸ and Port Call Number⁹. [Ref 8]

An observer can watch the entire booking process unfold on the RUDI. The RUDI is gradually filled in as each step of the

⁸The TCN is a 17 position alphanumeric data element assigned to control a shipment unit throughout the transportation pipeline. The TCN for each shipment is unique and not duplicated. [Ref 11:p. C-1]

⁹The Port Call Number is a letter followed by four digits. The letter shows the shipment's area of origin. For example, P signifies a shipment from the Pacific Coast. [Ref 8]

booking process occurs. [Ref 8] A sample RUDI is provided as Appendix A. The RUDI is essentially the record of the data flow through METS. This data flow is shown in Figure 2.

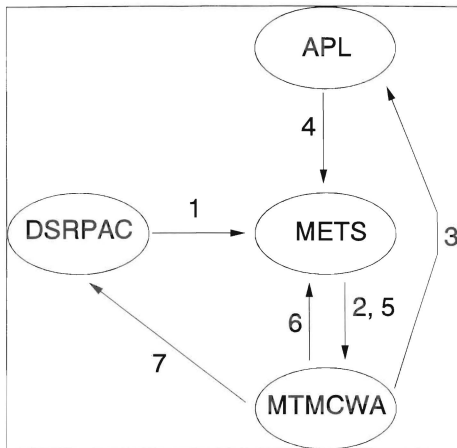


Figure 2 METS Data Flow

The three key numbers that appear on the RUDI are the Port Call Number, the commercial voyage number, and the TCN. The

Port Call Number is what MTMC uses to track the shipment. Only MTMC uses this number. The voyage number is assigned by the carrier to a particular ship for a specific voyage. The TCN should be how the shipment is tracked throughout the Defense Transportation System (DTS), but is not used in every phase of this process. This point will be explained later.

A seavan TCN assigned by OCCA differs from most TCNs used in the DTS because it uses the voyage number vice a Julian date, and uses a suffix that identifies container service payment responsibility and container type. This unique format for seavan TCNs is required by DoD Directive 4500-32R, *Military Standard Transportation And Movement Procedures (MILSTAMP)*. [Ref 11:p. C-1]

MTMC picks a carrier and makes the booking based on availability and cost. MTMC obtains the cheapest rates possible under the tariffs. On the West Coast, there is little price difference between APL and SeaLand. Availability of assets is often the deciding factor on who is booked. (Exceptions would be a case like Guam, where APL has all controlled atmosphere bookings.¹⁰) The East Coast usually gets offers and counter-offers from different carriers due to the volume of traffic

¹⁰It is very expensive to purchase controlled atmosphere vans. In order to implement the new FFV process to Guam, the carrier would have to purchase new controlled atmosphere vans specifically for shipments to Guam. APL was made the exclusive carrier to Guam for controlled atmosphere shipments because of the high initial investment involved. [Ref 8]

and availability of competition. The West Coast usually accepts the initial booking offered.

In the case of APL, an APL Personal Computer (PC) at MTMCWA provides an advanced Transportation Control and Movement Document (TCMD) based on what APL believes will be shipped. MTMCWA matches this with the RUDI. OCCA personnel match the data to insure the correct cargo is booked for the voyage. [Ref 8]

The carrier picks up the FFV directly from DSO Alameda's warehouse.¹¹ DSO Alameda personnel load the FFV directly into the container. DSO Alameda prepares a local document, called a Warehouse Loading Worksheet. An example of a Warehouse Loading Worksheet is provided as Appendix B. The Warehouse Loading Worksheet shows what was actually loaded into the container. [Ref 7]

More than one customer's FFV may be loaded in a van. This is because the FFV must be loaded by compatibility, not by customer.¹² For example, a van destined for Guam will usually have three customers -- NSD Guam, DeCA Guam Naval Station and DeCA Andersen Air Force Base. DSO Alameda sends the data

¹¹If an entire van is going to be filled with a single product, it may be picked up directly from the vendor vice DSO Alameda's warehouse. [Ref 7]

¹²In order to avoid confusion, only one customer's FFV will be loaded on a particular pallet. Thus a particular pallet may not be a full MTON. In fact, they usually are not. [Ref 7]

on the order to DPSC in Philadelphia via a computer system called PISCES. DPSC receives the data in order to relay it to the 1302nd Major Port Command and to the ultimate consignees. [Ref 7]

PISCES will automatically calculate the cube of the FFW being sent. Unfortunately, PISCES does not take into account the cube of the pallets, meaning the space occupied by the pallets is never accounted for. [Ref 3] This is a considerable oversight, since a standard wooden pallet used by DoD is 40" x 48" x 7", or approximately 7.78 cubic feet (ft³). As will be seen later, certain billings are based on cubic feet. Thus, this could be a critical oversight. However, it will also be shown that this oversight will ultimately have a relatively small effect on the customer's shipping costs.

After receiving the data, DPSC forwards it via TOLS to the 1302nd Major Port Command. [Ref 8] DPSC also sends the data to DSO Alameda and the customer via message, and to DSO Alameda by computer link. [Ref 7]

The 1302nd Major Port Command must have the cube data 72 hours prior to ship's sailing in order to prepare the manifest. Unfortunately, the data does not always reach the 1302nd Major Port Command from DPSC in time for them to prepare the manifest. [Ref 7] If the 1302nd Major Port Command fails to receive the shipping data in time from DPSC, they obtain the data from DSO Alameda either by fax or by hard

copy via messenger. The 1302nd Major Port Command manually loads the data into TOLS. [Ref 7;Ref 12]

The hand-written spreadsheet, with DSO's estimates of the cube that will be shipped in each van, is in fact the normal means for the 1302nd Major Port Command to receive this data. DPSC is considered a "black hole" for information by the West Coast participants of this process. [Ref 7;Ref 12]

The manifest serves as the TCMD. [Ref 8] The TCMD is required for each shipment unit entering the DTS.¹³ [Ref 11:p. P-1] The TCMD lists all data about a shipment. It is the master document for material in the DTS. TCMDs can be in any of several formats. The most common are the DD Form 1384 (TCMD) and DD Form 1384-1 (DoD single line item release/receipt document). The TCMD may be used as a dock receipt, tally sheet, highway waybill, or for other transportation control purposes. The purpose of the TCMD is to provide clearance authorities, ports, receivers, and other interested transportation personnel with advance notice of shipments and the information necessary to process the shipments through the DTS. [Ref 11:p. 2-B-18] The manifest prepared by the 1302nd Major Port Command is distributed to

¹³A shipment unit is one or more items assembled into one unit which becomes the basic entity for control throughout the transportation cycle. [Ref 11:p. A-15] For FFV, a shipment unit would be everything for a particular customer in a particular container.

the carrier, the Port of Debarkation (POD),¹⁴ MTMCWA, MSCPAC and Military Sealift Command Headquarters (MSCHQ). [Ref 8;Ref 12;Ref 13] Figure 3 shows the TCMD flow.

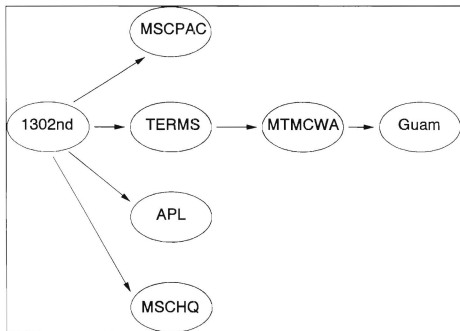


Figure 3 TCMD Distribution

The information on the TCMD is the basis for preparing air and surface manifests. [Ref 11:p. 2-B-18] Normally the shipper prepares the TCMD, and the manifest is prepared using the various TCMDs that make up the entire shipment being placed

¹⁴The POD is an authorized point of entry into a foreign country or the United States. [Ref 11:p. A-11]

onboard a particular ship. The way this particular system is set up, DPSC provides the data to the 1302nd Major Port Command via TOLS (or DSO Alameda provides it via alternate means). The manifest is generated using TOLS. The TOLS output is sent to the government printing office to be printed for distribution. Since the manifest is already generated, and contains all the data required on a TCMD, the manifest is used as the TCMD. Since the TCMD is the key for movement through the DTS, the 1302nd Major Port Command's requirement for shipment data at least 72 hours prior to ship's sailing is very reasonable.

The information on the TCMD is described either as prime data or trailer data. Prime data is required for every shipment. Trailer data is supplementary, but is required for some specific types of shipments. Shipments consolidated into a seavan, MILVAN, CONEX, or other consolidated container require a prime data entry for the consolidation container in addition to the prime and trailer data for each shipment unit. [Ref 11:p. 2-B-18] Because of this, the TCMD for DSO Alameda's shipments has both a TCN for the container itself and a TCN for each customer's consignment.

The actual contents of the vans are identified for tracking purposes by the requisition number of the leading product

loaded in the van.¹⁵ Requisition numbers are made up of the customer's Unit Identification Code (UIC) or Department of Defense Activity Address Code (DoDAAC),¹⁶ Julian date of the order, and serial number assigned by the customer. The contents are not identified by TCN or by van number.¹⁷ Only DSO Alameda knows the sequence in which the FFV was loaded. Therefore only DSO Alameda knows what other FFV was loaded along with the leading requisition number item. The customers cannot track their orders. [Ref 3]

The TCMD lists the van number, the TCN assigned to the van itself since it is a consolidated shipment, and the TCNs assigned to each customer's portion of the van's contents in terms of weight and cube. There is no description assigned to these TCNs except "Food, Chilled". Nowhere are the actual contents listed. [Ref 14] There is no in-transit visibility.

A new system of direct booking is currently being tested between DSRPAC and MTMCWA. Under this system, DSRPAC arranges the booking directly with the carrier. All MTMCWA does is observe. [Ref 8] The new data flow is shown in Figure 4. One

¹⁵The leading product is the first requisition listed on the FFV order, and is the first item loaded into the container.

¹⁶The DoDAAC is a six position alphanumeric code that identifies a specific activity who is authorized to ship or receive material and to prepare documentation or billings. [Ref 11:p. A-5]

¹⁷All containers are assigned permanent identification numbers by their owners.

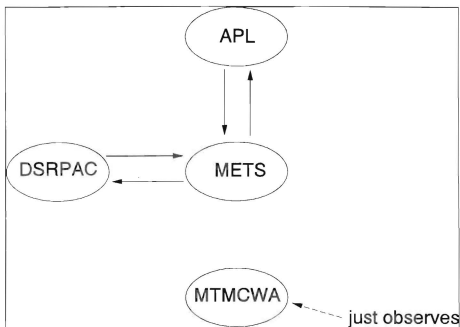


Figure 4 METS Data Flow Under Direct Booking Method

difference with direct booking is that only the lead line item is listed, vice all line items. This is not a function of the direct booking system, but a conscious decision on the part of DSO Alameda. The lead item is "ballooned out" -- the weight and cube given for it are in fact the weight and cube for the entire shipment. DSO Alameda does this in order to cut down input time. In other words, it takes less time to load one line item into the system than multiple line items. The quicker the data is loaded, the sooner a confirmed booking can be arranged. The data must be loaded into METS within

sufficient time that a carrier will accept the booking. [Ref 15] A sample direct booking RUDI is provided as Appendix C.

Direct booking is only the latest change to the process. METS is still evolving. Originally METS was internal to MTMC. The shipper called MTMC by phone, and MTMC arranged the booking with the carrier by phone. The system was expanded, and the shippers (DSRPAC, in this case) were given a PC with modem and appropriate software so that bookings could be requested via METS instead of via phone. [Ref 8]

The problem with METS is that it is not versatile, i.e., it is very hard to fix mistakes. An even bigger problem is that it is not integrated with TERMS or TOLS. This causes tracking and auditing problems. The Worldwide Port System (WPS) will start the process of integrating TERMS and METS, and is supposed to solve the in-transit visibility problem. WPS should be fielded in the summer of 1994. MTMCWA will be the test site. [Ref 8] Integration will be completed by the Integrated Booking System (IBS) and the Integrated Cargo Database (ICDB). How the systems will interface is shown in Figure 5.¹⁸

Having discussed data flows, it is time to return to the actual FFV movement. The carrier trucks the container to the

¹⁸There are more computer systems involved under current automation than the ones shown in Figure 5. Only the systems pertinent to this thesis are shown.

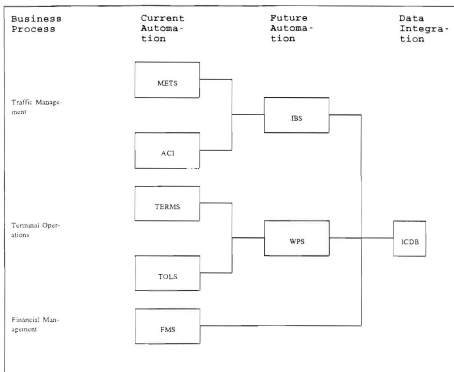


Figure 5 Future Integration of MTMC Automated Systems

port, where it is loaded on the carrier's vessel. After the ship sails, the carrier sends a load list to MTMCWA and the 1302nd Major Port Command.¹⁹ The 1302nd Major Port Command matches the TCMD and the load list. MTMCWA matches the load list with the manifest and METS data. One of the problems with this process is a complete lack of interfaces among the various systems. METS is used in the booking process. Data

¹⁹The load list is what was actually loaded onto the vessel.

is loaded into TERMS when the container is loaded. The data from METS, TERMS and the load list is compared by 1302nd Major Port Command personnel and OCCA personnel independently. Data comparison is by hand, i.e., by personnel physically comparing various documents. [Ref 8;Ref 16]

The FFV transits to Guam on the carrier's vessel, where it is offloaded at the commercial port. It is then delivered by the carrier's truck to the appropriate customers. [Ref 8]

III. COSTS AND BILLING

DSO Alameda's customers ultimately pay two amounts: MTMC's surcharge and MSC's fee for shipping the container. The 1302nd Major Port Command attaches the MTMC surcharge [Ref 9]. Since the FFV is passing through the commercial port, not the military port, only an administrative fee is charged [Ref 18].²⁰ The actual billing of the surcharge is done by the Defense Finance and Accounting Service (DFAS) Bayonne, New Jersey. DFAS receives the data via TOLS. [Ref 19]

MSCHQ actually bills for shipping the container. MTMCWA prepares the Government Bill of Lading (GBL) based on the manifest, leaving the dollar value blank. The dollar value is left blank because the carrier's actual expenses are not yet known. The original GBL goes to the carrier, and a copy goes to MSCPAC. The carrier fills in the GBL with the actual expenses incurred and the corresponding payment owed. The carrier verifies expenses by attaching invoices to the GBL. The carrier sends the GBL with attached invoices to MSCPAC, who verifies it and sends the carrier payment. [Ref 17]

²⁰The administrative fee is called the berth term shipment rate and is the charge for services performed by MTMC in connection with releasing, booking, documenting, and expediting all offshore, intercoastal and coastal export and import shipments moving under commercial tariffs. [Ref 4:p. 8]

There are no Transportation Account Codes (TAC codes²¹) on the GBL, proving that it is not used to bill customers is [Ref 20]. In accordance with MILSTAMP, TAC codes are how both MTMC and MSC identify who to bill for using the DTS [Ref 14; Ref 21; Ref 22:p. 1-1]. The GBL cites the MSC accounting line vice TAC codes.²² Using this accounting line is per MILSTAMP Volume 2. It is used because MSCPAC makes the payment to the carrier with MSC funds.

Though the customer only makes two payments, there are three groups who must receive payment: the carrier, MTMC and MSC. Each of these will be examined in turn.

A. THE CARRIER

Tariffs are the rate books which provide the dollar charge on a given class of transportation movement [Ref 7:p. 220]. Ocean carriers' tariffs (rates) are negotiated by MSC and are published, just as they would be published for commercial shippers. In the case of the tariffs negotiated by MSC, there are certain charges the shipper always has:²³

²¹TAC codes are four character alphanumeric codes which identify the appropriate Service, Agency, or contractor account to be charged for transportation. [Ref 12:p. A-17]

²²The appropriation and subhead used are 17X4912.3302. [Ref 22:p. 7-11]

²³Tariffs are charged either on a per container basis, or per revenue ton, whichever is higher per container. A revenue ton is either a short ton (WTON) (2000 lbs) or MTON, whichever is higher per container.

1. drayage at point of origin;²⁴
2. wharfage charge at point of origin;
3. ocean carriage;
4. wharfage at destination;
5. drayage at destination; and
6. fuel surcharge (a result of the 1973 oil crisis, based on cost of bunker charges at the time).

When shipping FFV in controlled atmosphere vans, there is an additional mandatory charge for using these vans.²⁵ [Ref 9]

Other possible commercial charges are:

1. stop off charges;²⁶
2. detention;²⁷ and
3. maintenance.²⁸ [Ref 9]

The carrier is a commercial firm, so it seeks to make a profit. When an ocean carrier puts in a bid for a particular tariff with MSC, both costs and profit are included.

MTMCWA uses the tariffs to estimate the cost of shipment.

²⁴Drayage is the rate for transporting freight in trucks or carts to alongside a vessel. [Ref 7:p. 76]

²⁵Controlled atmosphere vans are maintained by the Transfresh Company. This fee is the payment to Transfresh. [Ref 23]

²⁶Drayage involves pick up or drop off to a single point; stop off charges are for intermediate delivery points. [Ref 9;Ref 24]

²⁷Detention is the charge assessed on the container when it is held beyond the free time allowed for loading or unloading. [Ref 7:p. 70]

²⁸The costs to run a refrigerated van while it's sitting awaiting offload. [Ref 9]

If a potential shipper asks for the cost to ship something, they would receive an estimate from MTMCWA. The actual cost could be higher based on expenses incurred by the carrier. Shippers could do their own estimates if they had a copy of the tariffs and knew which applied. [Ref 9] It is similar to bringing your car to a mechanic--he will give you an estimate of the cost prior to doing any work, but the actual cost could be higher based on what work is performed on the car. The invoice the carrier presents to the government is based on all actual costs incurred.

The MTMCWA estimate serves two purposes: first, it gives the customer some idea of the shipping charges, although in the case of seavans it is essentially meaningless data for the shipper. It is important to realize that for containers this is not an estimate of the shipper's cost; it is the government's approximate cost of the shipment. The second purpose of the estimate is to give MSCPAC an idea of what the cost should be. If MSCPAC finds there is too large a discrepancy between the estimate and bill presented, MSCPAC will refuse to pay the bill until the charges have been successfully validated, i.e., proven to MSCPAC's satisfaction they are legitimate. [Ref 9]

B. MTMC

MTMC originally operated under the Army Stock Fund (ASF). Now they operate under the Defense Business Operating Fund (DBOF), the revolving fund that replaced (and absorbed) all the services' stock funds and industrial funds. The rates MTMCWA (or any other area command of MTMC) charges depends on the services provided. These services are shown in Department of the Army Circular 55-92-1, *Military Traffic Management Command Port Handling Billing Rates FY 1993*, a copy of which is included as Appendix D.

As previously stated, in the case of DSO Alameda's FFV, only the berth term shipment rate is charged [Ref 18]. But how are these rates calculated? Before that question can be answered, a quick look at DBOF is necessary.

1. DBOF

DBOF was established on October 1, 1991, by DoD to expand the use of businesslike financial management practices throughout DoD. DBOF is based on the revolving fund principles formerly used by industrial and commercial-type activities. [Ref 25:p. N-3] DBOF absorbed all of the services' stock fund and industrial fund assets. [Ref 25:p. N-10]

DBOF's primary objective is to provide incentives to managers and employees of DoD organizations so that they will provide products and services at the lowest cost. DBOF is sup-

posed to increase cost visibility, enabling managers to make better informed decisions. DBOF emphasizes providing quality service while realizing significant monetary savings through better business practices. Reduced costs mean DoD will be able to accomplish its mission more effectively within available resource constraints. [Ref 25:p. N-3]

Under DBOF, each DoD business component has an operating budget and a capital budget. This breakout of capital investments and capital costs provides management with increased visibility and identifies operating costs at all management levels. [Ref 25:p. N-4]

The products and services required by customers will determine the resources used. Each manager is expected to hold costs within the product of approved unit cost goals multiplied by the number of units of customer-determined workload. Total costs of each business area will be available, and if possible, unit cost resourcing goals will be supplied for the primary outputs of the business area. As a result, managers should be able to make trade-off decisions that provide the best operating results for their area. [Ref 25: pp. N-4-N-5]

DBOF includes military and civilian personnel costs. DBOF activities included depreciation of all capital investments as a cost of operations beginning in FY93. [Ref 25:p. N-9]

DBOF's policy is that activities will budget on a break-even basis. The objective is full recovery of costs by the

end of the budget year. The prices and rates established at the beginning of the year are fixed for the entire year. Establishing rates based upon costs is expected to give managers and customers the guidance they require to make cost-effective decisions. [Ref 25:p. N-10] DBOF activities must recover all their costs, including overhead costs. These factors will affect the MTMC and MSC processes for determining rates.

Since DBOF requires its activities to recover all costs, customers using DTS to move cargo must not only pay for the direct shipping costs, but must also pay all overhead costs and some military personnel costs. [Ref 26]

2. Computation of MTMCWA Port Handling Billing Rates

MTMC has three functional areas for operating costs and billing purposes. These functional areas are Traffic Management, Special Missions, and Port Operations. Each of these areas is billed in a different fashion, though all are processed through DBOF. [Ref 27]

Traffic Management covers managing and storing personal property, inland cargo routing, and the discrepancy reporting of the Assistant Chief of Staff for Operations (ACS-OPS).²⁹

²⁹ACS-OPS combines the functions of three formerly separate branches: International Traffic, Inland Traffic, and Personal Property. [Ref 27]

Traffic Management is billed by a stabilized billing rate for each productive hour worked.³⁰ [Ref 27]

Special Missions include base operations, Morale, Welfare & Recreation (MWR), and Auxiliary Cargo Services and Special Port Actions.³¹ These expenses are recouped on a dollar for dollar basis. [Ref 27]

All other expenses make up Port Operations. This is the area that DSO Alameda's FFV operation is handled under. Port Operations are billed per MTON of throughput at predetermined rates. [Ref 27] The distribution and recovery of costs by functional areas are shown in Table 1.

Port Handling Billing Rates are composite rates for each commodity by geographic area for the Continental United States (CONUS) and areas outside the Continental United States (OCONUS).³² The MTMC Billing Rates, which are approved and stabilized by the Office of the Secretary of Defense (OSD),

³⁰A stabilized billing rate is a fixed amount charged per hour. It is normally set one year in advance. The principal objective of a stabilized billing rate is to shelter DoD customers from wide variances due to inflation, making budget planning for DoD customers easier. [Ref 25:p. H-17]

³¹Auxiliary Cargo Services and Special Port Actions include: (1) fumigations and removal of soil contaminating retrograde cargo; (2) segregating, repacking, remarking, or recouping cargo prior to onward movement when requested by the shipper; and (3) customs inspection of retrograde personal property. [Ref 27]

³²The five geographic billing areas are Western Area, Eastern Area, Caribbean, Europe, and Far East. Thus each commodity has its own rate within each of these areas. [Ref 4:p. 2]

Table I MTMC DISTRIBUTION AND RECOVERY OF COSTS BY FUNCTIONAL AREA

	Port Operations	Other Special Missions	Traffic Management
	Port Handling Billing Rates	Dollar For Dollar	Stabilized Billing Rates
Labor (Civil & Military)	Direct Costs Indirect Costs G&A Activities	Direct Costs Indirect Costs G&A Activities	Direct Costs Indirect Costs G&A Activities
Stevedores			
Contractual			
Materials/Supplies			
Other Services/Travel			

are prepared and submitted approximately two years prior to the execution year. [Ref 26]

The rates are reviewed as part of the Operating Expense Budget (OEB) the year prior to execution. The rates are published after the review. For example, the FY93 rates were prepared and submitted in June 1991, reviewed June 1992, and promulgated in July 1992 by message, followed by publication in September 1992 as Department of the Army Circular 55-92-1. [Ref 27]

Headquarters Military Traffic Management Command (HQ MTMC) issues the budget guidance which the geographic areas use to develop their billing rate proposal. This guidance is:

1. anticipated cargo workload for CONUS and OCONUS;
2. anticipated manpower levels;
3. anticipated pay increases;

4. estimated inflation factor; and
5. MTMC's gain/loss position. Did MTMC make money, lose money, or break even the year prior to the guidance being issued? The goal is to break even. [Ref 27]

Guidance from HQ MTMC is based on historical trends. Still, in the author's opinion, calculating such factors as pay raises and inflation for two years into the future is at best scientific guesswork, and at worse crystal-ball gazing.

Based on HQ MTMC's guidance, the ACS-OPS reviews the prior year's cargo workload and determines workload distribution by commodity and subordinate command.³³ This information is normally included in MTMCWA's budget call to the staff and subordinate commands. The budget call and budget guidance is provided by the Budget Division and include cargo workload distribution. The staff and subordinate commands then develop expense budgets which the Budget Division reviews. The Budget Division makes corrections, adjusts data, inputs the data into

³³Subordinate commands are geographic areas within the area commands. The ACS-OPS determines the level of workload for each geographic area under his jurisdiction. The subordinate commands for MTMCWA are:

<u>Name</u>	<u>Location</u>
1302nd Major Port Command	Oakland, CA
1312th Medium Port Command	Compton, CA
1313th Medium Port Command	Seattle, WA
1315th Medium Port Command	Okinawa, Japan
1316th Medium Port Command	Yokohama, Japan
1317th Medium Port Command	Pusan, Korea
Military Traffic Command Pacific	Waaf, HI [Ref 26]

the Financial Management Systems (FMS) Budget Module, and finalizes the expense budget for MTMCWA. [Ref 27]

All costs must be recovered under DBOF. Table 2 shows the factors used by staff and subordinate commands to develop costs. The left side of the table shows the business functions within the staff and subordinate commands. The right side of the table shows the categories of expenses into which each of the business functions is broken down. [Ref 27]

Table II COSTS TO BE RECOVERED UNDER DBOF

Business Functions	Categories of Expenses (Apply to each business function)
	General & Administrative (G&A) Activities
	Traffic Management
Labor (Civilian & Military)	Engineer (Space)
Stores/Stores	ADP Services
Materials/Supplies	Telephones/Communications
Contractual	Equipment Expense
Other Services/Travel	Indirect Cargo
	Direct Cargo
	Special Mission

The Budget Division then loads the prior year's distribution and billing rates, and produces the initial cargo cost and revenue reports. These reports are produced on a Lotus spreadsheet. [Ref 27]

Once the cargo cost and revenue reports are produced in the budget module, costs have been distributed to each commodity, and the total revenue generated. Costs and revenues are compared. The gain/loss position provided by HQ MTMC is applied to the total cost to establish the recovery baseline to build the Port Handling Billing Rate. The Billing Rates are modified based on historical patterns. The rates are then included in MTMCWA's budget submissions to HQ MTMC. [Ref 27]

HQ MTMC reviews and consolidates the budgets from all the area commands and develops one composite MTMC rate increase, i.e., percentage of revenue increase. There is only one composite rate increase because it applies to MTMC as a whole. Two components are submitted--Port Operations and Traffic Management. A composite MTMC rate increase is not needed for Special Missions since they are recouped on a dollar for dollar basis. HQ MTMC submits the budget and revenue rate increases (percentage) to the U.S Transportation Command (TRANSCOM), who in turn sends it on to OSD. OSD reviews the budget and proposed rates, and modifies the rates based on known budget changes. OSD then provides MTMC with an approved rate. For example, OSD approved a maximum increase for FY93 of 3.1% over FY92. HQ MTMC adjusts the area commands' proposed rates to meet MTMC's needs, and publishes the rates by billing area. In FY93, all of the area commands' rates as a

whole were set so that MTMC's total charges for FY93 were within 3.1% of MTMC's total charges for FY92. [Ref 27]

The key to the process is that the area commands develop proposed rates which are finalized by HQ MTMC. The process must ultimately recoup all of MTMC's costs taken as a whole. [Ref 26]

To return to the example, OSD approved a 3.1% increase for FY93 billing rates in the Fall of 1991. Based on the "winners and losers" as far as operating gains or losses, the HQ MTMC distribution resulted in the rate changes shown in Table 3. [Ref 27]

Table III MTMC RATE CHANGES

Billing Area	FY92	FY93
Caribbean	+10.6%	-2.4%
Far East	+41.3%	-8.0%
EA/Gulf Coast	+12.2%	+1.0%
Western Area	+ 5.4%	+7.9%
Europe	+12.1%	+6.6%

The rate changes in Table 3 are over all rates; actual rates for a specific service for a specific commodity for a

particular area may be higher or lower than the rate changes above.

Port handling constitutes the majority of costs, so the majority of overhead is allocated to the Port Handling Billing Rates. Indirect costs for Port Operations include such expenses as the terminal staff, so a MTMC customer is paying for them even if the military terminal is not used. G&A for all three categories would include such expenses as the MTMCWA Judge Advocate General (JAG). [Ref 27]

The main problem MTMCWA (and the other area commands as well) has with billings is invalid TAC codes. Shippers are responsible for ensuring the correct TAC code is used. In FY93 MTMCWA had over 8000 shipment units that had not been paid for because invalid TAC codes were assigned to those shipments. [Ref 21]

C. MSC

MSC handles two steps in the process. First, MSC negotiates the tariffs for all ocean carriers by competitive bid.³⁴ Second, MSC always pays ocean carriers. Thus ocean carriers deal first with MSC, then with MTMC, then with MSC again. [Ref 9;Ref 28] Theoretically, either organization is capable of handling the entire process. Having one organiza-

³⁴Bids to MSC are always for between two specific points, for example, shipping from Norfolk, Virginia to Bremerhaven, Germany. [Ref 28]

tion handle the process would conceivably introduce efficiencies and lower costs. [Ref 9]

1. MSC Rate Development

MSC was originally under the Navy Industrial Fund (NIF), but has been under DBOF since FY92. Like MTMC, MSC needs to break even. Also like MTMC, MSC as a whole must break even³⁵. [Ref 28]

Also like MTMC, MSC's rates are established two years in advance, and are approved by OSD. The rates are stabilized so that DoD customers can request the needed appropriations for their estimated needs based on the stabilized rates.³⁶ [Ref 28]

The MSC rate is composed of:

1. direct labor;
2. overhead;
3. previous gain/loss; and
4. depreciation. [Ref 28]

MSC rate development is similar to MTMC's rate development, which has already been described in detail. Briefly, there is a commercial bid for ocean transportation rates per MTON for

³⁵Thus the possibility exists that one part of the system will be used to subsidize another part.

³⁶Like MTMC rates, the author feels rates are established using a lot of guesswork. MSC customers are estimating services required also, and could estimate incorrectly.

each direction between each pair of ports. Ancillary charges such as drayage are added in. Cost of operations, including overhead, are based on statistical data of previous shipments, and have an inflation factor added. The recommended rates are forwarded to TRANSCOM, who reviews them and forwards them to OSD. OSD makes a revenue adjustment, and can arbitrarily set rates at a certain amount in order to subsidize certain areas or some DoD customers. The approved rates are then published two years in advance as the MSC Rate Guide. [Ref 28] A page from the MSC Rate Guide is provided as Appendix E.

MSC does not bill individual organizations because of the huge amount of traffic they handle and the huge number of billings associated with this traffic.³⁷ DoD billings are sent to the services, who are expected to sort out the charges and bill the appropriate commands. For example, all Navy bills for a given month would be sent to NAVCOMPT, who would then bill an individual command such as NSD Guam. Billing is by TAC code. In the case of FFV, MSCHQ would bill DPSC, who in turn would bill DeCA. [Ref 14;Ref 28;Ref 29]

2. Computation of MSC Container Billing Rates

After MSCPAC has received the GBL from the carrier, they validate it and pay the carrier. They do not bill the

³⁷MSC paid over \$400 million to ocean carriers in FY93. [Ref 28]

shipper. Billing is handled by MSCHQ. Besides making payments to the carrier, MSCPAC matches the billings (called the Unit Level Billing (ULB)) to the manifest in order to avoid double billings. MSCPAC is also responsible for ensuring the proper payment is made to the carrier and for validating the invoices to avoid excess charges to the government. [Ref 14]

Until now, the process of shipping FFV has involved keeping accurate track of what was being charged by the carrier. Once MSCHQ receives the manifest, this information is no longer important for that particular billing. MSC will use the data for historical purposes to calculate their container rates, but does not use it for billing the customer. The billing is not on a dollar for dollar basis. Instead, MSCHQ bills for 100% utilization of the container at their published rates. This accounts for dunnage, which previously was not accounted for. However, it means the customers always pay the same rate for a shipment. In the case of FFV, it costs the customer the same to ship one pea, or a container filled to the maximum.³⁸ Each customer's share of the shipment has a TCN and TAC code assigned on the manifest. Using these, MSC prorates empty space among the customers in the van. [Ref 29]

³⁸One hundred percent utilization of a container for FFV is impossible, since space must be allowed for gas circulation. [Ref 16]

It is easier to illustrate the MSC billing process than to describe it. The following example will illustrate the process. The van contains cargo for three different customers, who will be referred to as customer A, customer B, and customer C. First, assume the container has a 100% capacity of 2360 ft³, or approximately 59 MTON. The actual contents of the container are referred to as the K-Record, which in this case are listed as 2000 ft³, or 40 MTON. The actual breakdown on the manifest is:

750 ft³ for customer A;
600 ft³ for customer B; and
650 ft³ for customer C.

This actual breakdown from the manifest is the M-Record. Since $750 \text{ ft}^3 + 600 \text{ ft}^3 + 650 \text{ ft}^3 = 2000 \text{ ft}^3$, the M-Record matches the K-Record. Since the records match, a utilization factor is calculated.

The utilization factor is calculated by dividing the actual utilization by 100% utilization. In this example, $2000/2360 = 84.8\%$ utilization factor. The published MSC billing rate for this example is \$50 per MTON for 100% utilization. The cost for the shipment is $59 \text{ MTON} \times \$50/\text{MTON} = \2950 . The charge for the non-utilized (i.e., empty) space is billed using the deficit factor.

The deficit factor is calculated by dividing 100% utilization by the actual utilization. In this example, $2360/2000 = 1.18$ deficit factor. The revised billing rate is \$50 per MTON x 1.18 = \$59 per MTON.

Thus the actual billing to each customer is:

Customer A: $(750 \text{ ft}^3/40 \text{ MTON}) \times \$59/\text{MTON} = \$1,106.25$

Customer B: $(600 \text{ ft}^3/40 \text{ MTON}) \times \$59/\text{MTON} = \$ 885.00$

Customer C: $(650 \text{ ft}^3/40 \text{ MTON}) \times \$59/\text{MTON} = \$ 958.75$

Total = \$2,950.00

The 100% utilization rate = \$2,950.00 = total billing to all three customers. [Ref 29] The total space in the van has been prorated among the three customers.

D. PROPOSED ALGORITHM

It should be possible to calculate the costs throughout the entire process of shipping FFV. The requirements are to know the commercial tariffs, MTMC's rates and MSC's rates. Because the purpose behind the new system of shipping FFV is to effectively ensure JIT delivery, the algorithm presented here will assume only mandatory charges will apply.

1. Payment to the Ocean Carrier

The first equation is the payment to the ocean carrier. The payment to the ocean carrier equals drayage plus U.S. wharfage charges plus ocean carriage plus POD wharfage charges plus controlled atmosphere charge plus fuel surcharge.

2. MTMC Surcharge

MTMC's surcharge is billed to the recipients of the FFV based on TAC code. The MTMC surcharge equals the MTON of the shipment multiplied by the MTMC berth term shipment rate.

3. MSC Billing

MSC's charge for shipping FFV in controlled atmosphere containers, like MTMC's surcharge, is billed to the recipients of the FFV based on TAC code. The first step is to determine the following factors:

1. the container billing rate;
2. the cube of each customer's portion of the shipment;
and
3. the maximum cube of the container.

The next step is to calculate the utilization factor and the deficit factor. Using this data the revised billing rate is calculated. The final step is to multiply each customer's cube times the revised billing rate.

An actual test case was followed to see if the this algorithm can successfully predict actual payments. The results of this test case are presented in the next chapter.

IV. TEST CASE

A. FIRST ATTEMPT

To test the validity of the sequence of events listed in the preceding chapter, an actual case was followed. The FFV was destined for Guam, with three consignees: NSD Guam, DeCA NAVSTA and DeCA Andersen AFB. The case involved tracking van APLU 510186. The van was loaded 29 December 1993, and the Warehouse Loading Worksheet [Appendix F] was prepared that day. This information was transmitted via PISCES the same day. [Ref 16;Ref 30]

DPSC relayed the data via message [Appendix G] with a date/time group (DTG) of 212309Z JAN 94. A transmission [Appendix H] was also sent via PISCES from DPSC to DSO Alameda acknowledging the information previously sent from DSO Alameda to DPSC via PISCES. There is no record of transmission time or receipt time. [Ref 16]

This shipment was booked via the new direct booking method, so MTMCWA was not directly involved at this stage. The 1302nd Major Port Command did not receive any information of the shipment from DPSC. The information was passed from DSO Alameda to the 1302nd Major Port Command either by fax, phone message, or courier. The 1302nd Major Port Command manually loaded the data [Appendix I] into TOLS. [Ref 13]

Using the data in TOLS, the 1302nd Major Port Command generated the Cargo Manifest [Appendix J]. MTMCWA received a copy of the manifest and also received the data from APL via an APL/MTMCWA computer link. [Ref 17]

At this point the shipment could not be traced further. Insufficient time had occurred for the paperwork to be completed, even though the customers had already received the FFV. MTMCWA has a rule that GBLs are to be completed and sent to the carrier within 21 days of the manifest being received. The GBL had not yet been generated in this case. MTMCWA's status in January 1994 for completing GBLs is given in Appendix K. Appendix K shows the number of GBLs not yet generated and the amount of time in days they have been awaiting completion. GBLs that have not been generated in less than 43 days have some major discrepancy, such as a missing manifest [Ref 17].

B. SECOND ATTEMPT

The second attempt to test the validity of the algorithm concerned a shipment that had occurred in June and July of 1993. The particular van tracked in this case was APLU 599150. According to DSO Alameda, this van had 553 cases of FFV, with a weight of 23,446 lbs (or 11.723 WTON) and a cube of 1,511 ft³ (or 37.775 MTON). [Ref 31] The Warehouse Loading Worksheet is shown as Appendix L. The DPSC message acknowl-

edging DSO Alameda's PISCES input and notifying the customers of the shipment is shown as Appendix M.

Table 4 shows the theoretical cost per the thesis algorithm, MTMCWA's calculation of the cost, [Ref 32] and the amount actually received by APL from MSCPAC [Ref 24]. The algorithm is supposed to duplicate the MTMC model to allow realistic cost estimates; the thesis algorithm and the MTMC calculations match. These estimates were \$88.88 different from actual payment to APL. The difference was in the U.S. wharf charge [Ref 24]. The reason for the difference cannot be determined. APL confirmed that the amount billed and paid was \$100.00, and that the rate for MTON (\$5.00 per MTON) was used [Ref 24]. At these rates, APL must have billed for 20 MTON vice 37.775 MTON, but why this should be cannot be identified. This was the only discrepancy between the thesis prediction and actual payment.

Table 5 shows the algorithm's prediction of what berth term shipment rate should have been used for this shipment and the billing resulting from multiplying this rate by the cube (in MTON) of the shipment. It also shows the rate actually used by the 1302nd Major Port Command and the resultant billing [Ref 33]. Who was actually billed the \$458.21, or some prorated portion of it, was not determined. Based on the TAC code, DPSC should have paid it.

Table 6 shows what the algorithm predicted as the MSC billing and MSC's actual billing of DPSC [Ref 34]. Only the billing for the two commissaries was confirmed. These two billings were within three dollars of the algorithm predictions. The NSD billing was calculated by subtracting the two known billings from the total billing. MSC billed DPSC $\$3,581.55 + \$2,020.69 = \$5,602.24$. DPSC should then have billed this amount to DeCA. It was undetermined if the remainder of the billing was billed to the Navy or to DPSC. Based on the TAC code (see manifest, Appendix N), it was probably billed to DPSC, who would then have to bill the Navy.

The documentation showing the quantities and dollar amounts used in this case are included as appendices. Appendix O is the GBL generated by MTMCWA. Appendix P is the GBL received by MSCFAC from the carrier. Appendix Q is a printout of the microfiche record showing what MSC charged DPSC for the two commissary portions of the shipment.

Table IV PAYMENT TO CARRIER (APL)

Cost Area	Thesis Algorithm	MTMC Calculation	MSCPAC Pay- ment to APL
drayage: pick-up and delivery between DSO Alameda and APL's port in Oakland	\$170.00	\$170.00	\$170.00
U.S. wharfage charge	$54 \times 11.723 = \$46.89$ $55 \times 37.775 = \$188.88$ $\$188.88 > \46.89 \Rightarrow charge = \$188.88	\$188.88	\$100.00
ocean carriage	\$4,401.00	\$4,401.00	\$4,401.00
Guam terminal charge (includes Guam wharfage, handling and stevedore charges)	\$437.50	\$437.50	\$437.50
drayage: stop off charge	3 stops @ \$225 per stop = \$675.00	\$675.00	\$675.00
controlled atmosphere charge	\$400.00	\$400.00	\$400.00
fuel surcharge	N/A for Guam	N/A	\$0
additional charges: assume no delays in delivery or off-loading	\$0	\$0	\$0
Payment to APL	\$6,272.38	\$6,272.38	\$6,183.50

Table V MTMC SURCHARGE

	Thesis Algorithm	MTMC Billing
MTON	37.775	37.775
Berth Term Shipment through GBL export shipment rate	\$12.13	\$12.13
Billing	$37.775 \times 12.13 = \$458.21$	\$458.21

Table VI CALCULATION OF MSC CONTAINER RATES

	Thesis Algorithm	MSC Billing
Container Rate	\$177.25 per MTON	\$177.25 per MTON
100% Cube of 40' Controlled Atmosphere Container	45 MTON = 1800 ft ³	45 MTON = 1800 ft ³
Actual Contents (K Record)	1,511	1,511
Manifest (M Record)	679 + 383 + 449 = 1,511	679 + 383 + 449 = 1,511
Match?	Yes	Yes
Utilization Factor	$1,511/1,800 = 0.84$	
Cost of Shipment	$45 \times 177.25 = \$7,976.25$	$45 \times 177.25 = \$7,976.25$
Deficit Factor	$1,800/1,511 = 1.19$	
Revised Billing Rate	$177.25 \times 1.19 = \$211.15$	
DeCA Andersen AFB Billing	$(679/40) \times 211.15 = \$3,581.55$	\$3,581.55
DeCA NAVSTA Billing	$(383/40) \times 211.15 = \$2,020.69$	\$2,020.69
NSD Billing	$(449/40) \times 211.15 = \$2,374.01$	\$2,374.01 ¹
Total Billing	\$7,976.22	\$7,976.25 ²

¹This amount is not documented. The cost of shipment = \$7,976.25.
 The total billing must equal this amount. Since two of the three billings are known,
 the third can be calculated:
 $\$7,976.25 - \$3,581.55 - \$2,020.69 = \$2,374.01$.

²This amount is not documented, but the total billing must equal the cost of shipment.

V. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

The key question proposed by DSO Alameda were: What does it cost to ship a case of FFV? No matter how much FFV was actually shipped, the MSC billing for one controlled atmosphere container of FFV to Guam in FY93 was \$7,976.25. The MTMC billing would be from \$12.13 (a minimum of one MTON) up to \$545.85 (45 MTON x \$12.13). So in FY93 the cost to ship a controlled atmosphere container of FFV to Guam would be between \$7,988.38 and \$8,522.10. If the proper TAC codes are assigned, this amount will be prorated among the customers in the container.

The second question was whether using controlled atmosphere vans provided a savings over air shipment. In this test case, air shipment would cost \$1.26 per pound x 23,446 pounds = \$29,541.96, as opposed to the actual cost of \$8,434.46, a difference of \$21,107.50. In order for air shipment to be cheaper than surface shipment in the controlled atmosphere vans in FY93, the amount of FFV shipped would have to be less than \$7,988.38/\$1.26 or 6,400 pounds.

The next question was how MSC and MTMC determine rates. They are DBOF organizations, so they must recoup all costs. Rates are based on historical trends and future forecasts. In

addition, the rates are adjusted by OSD as they see fit to meet OSD's special requirements.

MTMCWA's surcharge is \$12.13 per MTON. MSC does not have a surcharge. MSC charges a container rate that includes all costs and overhead.

Billing is handled by TAC code. It is essential the correct TAC code be assigned to assure proper billing.

The reason for DSO Alameda's confusion as to what rate was being charged was because the rate the government is charged by the carrier is different than the rate MSC charges DSO Alameda's customers.

PISCES does not work. If the normal means of transmitting data from DSO Alameda to the 1302nd Major Port Command is by direct communication between DSO Alameda and the 1302nd Major Port Command, there is a problem with getting data out of DPSC. The current primary use for PISCES is to provide DPSC with data so that they can notify the customers by message.

Direct booking has eliminated MTMC from the process of arranging bookings. During peacetime, this can provide enormous efficiencies. Unfortunately, traffic management is like surge capacity--it is needed mostly in wartime. There is no problem in arranging bookings currently because there are sufficient assets to meet all customer needs. In wartime, as shown by Operations Desert Shield/Desert Storm, there is a shortage of ocean carrier assets. That is when traffic

management is needed. TRANSCOM would be able to tell MTMC which assets had first priority for movement. MTMC would then prioritize bookings. Otherwise, the first command to arrange the bookings would get them.

B. RECOMMENDATIONS

PISCES should be overhauled. Until the causes for its failure can be determined, DSO Alameda should automatically send cube data to the 1302nd Major Port Command and only use PISCES for informing DPSC of shipping data. DSO Alameda should include the appropriate TAC codes with the cube data to ensure proper billing. It is the shipper's responsibility (in this case DSO Alameda) to provide proper TAC codes.

The commercial container shipping process should be consolidated under one command, either MTMC or MSC. The current system promotes inefficiency and reduces the possibility of obtaining in-transit visibility. MSC handles ocean carriage and MTMC handles booking because of history and tradition. There are currently too many people reviewing and handling the same data.

All commands should agree on what identification numbers to use to track shipments.

The area commands should be allowed to set their own rates. If DBOF's goal is to achieve business efficiencies, then the area commands must be treated as separate profit and loss

centers. For example, it defeats the whole purpose of DBOF to have OSD arbitrarily set rates, and for MIMC and MSC to be treated as single units. MIMCWA and MSCPAC should set their own rates, and sink or swim on their own merits. In addition, this would reduce the number of manhours needed to develop the budget, and would eliminate the need to establish the rates so far into the future. DBOF requires stabilized rates to be set only one year prior to execution.

List of References

1. Department of Defense Directive 5105.22, *Defense Logistics Agency*, December 6, 1988
2. Defense Logistics Agency, *An Introduction to the Defense Logistics Agency*, undated
3. Interview between James Kerber, Lieutenant Commander, SC, USN, Chief, Defense Subsistence Office Alameda, Richmond, CA, and the author, June 18, 1993
4. Headquarters Department of the Army, Department of the Army Circular 55-92-1, *Military Traffic Management Command Port Handling Billing Rates FY 1993*, 30 September 1992
5. Handout from Naval Postgraduate School course *Material Handling Systems Design (MN 3375)*, Winter Quarter, Academic Year 1994
6. U.S. Naval Supply Systems Command Publication 553, *Inventory Management*, "Supply System Overview and Basic Inventory Management Concepts", January 3, 1991
7. Cavinato, Joseph L., Editor, *Transportation-Logistics Dictionary*, Third Edition, International Thomson Transportation Press, 1989
8. Interview between Reginald O. Richardson, Supervisory Traffic Management Specialist, Defense Subsistence Office Alameda, Richmond, CA, and the author, August 18, 1993
9. Interviews between Jon Gunn, Booker, Ocean Cargo Clearance Authority Branch, Military Transportation Management Command Western Area, Oakland, CA, and the author, November 15-18, 1993
10. Interview between Ferdinand Gonzales, Chief, Ocean Cargo Clearance Authority Branch, Military Transportation Management Command Western Area, Oakland, CA, and the author, August 18, 1993

11. Military Transportation Management Command, "Activity Update" on Integrated Cargo Database (ICDB) & Integrated Booking System (IBS), May 1993
12. Department of Defense Directive 4500-32R, Military Standard Transportation And Movement Procedures (MILSTAMP), Volume 1, Revision 3, May 7, 1992
13. Interview between Faye Eddins, Transportation Supervisor of Manifests, Traffic Management Division, 1302nd Major Port Command, Oakland, CA, and the author February 3, 1994
14. Interview between Helen Rhoden, Director of Performance and Analysis Division, Military Sealift Command Pacific, Nick Abdo, Performance and Analysis Division, Military Sealift Command Pacific, Oakland, CA, and the author, August 25, 1993
15. 1302nd Major Port Command, Cargo Manifest PCN E607-0620E, June 30 1993
16. Interview between Reginald O. Richardson, Supervisory Traffic Management Specialist, Defense Subsistence Office Alameda, Richmond, CA, and the author, February 3, 1994
17. Interview between Jon Gunn, Booker, Ocean Cargo Clearance Authority Branch, Military Transportation Management Command Western Area, Oakland, CA, and the author, January 27, 1994
18. Interview between Ken J. Recla, Commander, Supply Corps, U.S. Navy, Chief, Traffic Management Division, 1302nd Major Port Command, Oakland, CA, and the author February 3, 1994
19. Telephone conversation between Frank Hemming, Deputy Finance and Accounting Officer, Defense Finance and Accounting Center, Bayonne, NJ, and the author November 18, 1993
20. U.S. Government Bill of Lading C-7,799,129 dated July 19, 1993
21. Lecture by Judy Bryan, Chief, Program Management, Military Transportation Management Command Western Area, Oakland, CA, at Military Transportation Management Command Western Area, Oakland, CA, June 10, 1993

22. Department of Defense Directive 4500-32R, Volume II, *MILSTAMP TRANSPORTATION ACCOUNT CODES (TACS)*, Change 1, December 20, 1979
23. Interview with Wayne A DeLarouche, Key Account Manager for Hawaii, Guam and Alaska Sales, SeaLand Service, Oakland, CA, and the author November 16, 1993
24. Telephone conversation between Max McClain, Government Billing Clerk, American President Lines Government Billing Department, Denver, CO, and the author February 15, 1994
25. U.S. Navy, *Practical Comptrollership*, Naval Postgraduate School, Monterey, California, February 1993
26. Interview between Hal Swanson, Cost Analysis Branch Head, Military Transportation Management Command Western Area, Oakland, CA, and the author, January 13, 1994
27. Interview between Hal Swanson, Cost Analysis Branch Head, Military Transportation Management Command Western Area, Oakland, CA, and the author, November 17, 1993
28. Lecture by William D. Savitsky, Military Sealift Command Comptroller, Military Sealift Command Headquarters, at the Naval Postgraduate School, Monterey, CA, September 16, 1993
29. Telephone conversation between Don Petska, Director of Performance Reporting and Analysis, Military Sealift Command Headquarters, and the author February 16, 1994
30. DSO Alameda, Richmond, CA, Warehouse Loading Worksheet for TCN SCGA084020V016MP5, dated December 29, 1993
31. DSO Alameda, Richmond, CA, Warehouse Loading Worksheet for TCN SC03084340V005LP5, dated June 14, 1993
32. U.S. Government Bill of Lading C-7,799,129 dated July 19, 1993
33. Telephone conversation between Ken J. Recla, Commander, Supply Corps, U.S. Navy, Chief, Traffic Management Division, 1302nd Major Port Command, Oakland, CA, and the author February 28, 1994

34. Military Sealift Command, *Statement of Cargo Transportation Charges, Fiscal Year 93, Grid K 10*, undated

APPENDIX A:

[illegible]

APPENDIX B

WAREHOUSE LOADING WORKSHEET FOR FISC GUAM: N61119									
SHIPMENT # 03:				VAN A1		VAN NO.			
CUT OFF	SDD	ETA	RDD	ATMOSPHERE	VAN TEMP	HUMIDITY			
01/19/94	01/20/94	01/31/94	01/31/94	CONTROLLED	33 F	90 TO 95 %			
CARRIER		SHIP		TCN		VAN NO. SEAL NO.			
APL 80051738		PRES MONROE		V108		SCGA084020V016MP5		520186 448735	
USOA WAREHOUSE VAN LOADING SEQUENCE					CUSTOMER DELIVERY SEQUENCE				
LOAD 1'ST: HQCWHY					DELIVER 1'ST: N61119				
LOAD 2'ND: HQCWHZ					DELIVER 2'ND: HQCWHZ				
LOAD 3'RD: N61119					DELIVER 3'RD: HQCWHY				

COMMODITY	ITEM CODE	CUBE/CASE	TOTAL CUBE	AVG WT/CS	TOTAL NET WT	CASES
APPLE, RED, FANCY, 12.5 LB B	04042	1.90	57	40	1,200 LB	3
PEAR, 100-150 C	04670	1.75	14	36	239 LB	8

***** SUBTOTALS FOR VAN A1 *****
FOR N61119

CASES	38	LBS	1,483	CUBE	71.00
-------	----	-----	-------	------	-------

DATE REPORT PREPARED: 12/29/93 @ 11:06:02

PAGE 1

APPENDIX C

APPENDIX D

Department of the Army
Circular 55-92-1

Transportation and Travel

Military Traffic
Management
Command Port
Handling Billing
Rates FY 1993

Headquarters
Department of the Army
Washington, DC
30 September 1992

Headquarters
Department of the Army
Washington, DC
30 September 1992

Department of the Army
Circular 55-92-1

Expires 30 September 1993

Transportation and Travel

Military Traffic Management Command Port Handling Billing Rates FY 1993

By Order of the Secretary of the Army:

GORDON R. SULLIVAN
General, United States Army
Chief of Staff

Official:



MILTON H. HAMILTON
Administrative Assistant to the
Secretary of the Army

History. This UPDATE printing publishes a new Department of the Army circular.

Summary. This circular provides guidance on FY 1993 billing rates for services provided to DOD shippers by the Military Traffic Management Command.

Applicability. This circular applies to the Active Army, the Army National Guard, the

U.S. Army Reserve, and other Department of Defense customers. Others desiring Military Traffic Management Command port handling services should obtain rates from Commander, MTMC, ATTN: MTRM-B, 5611 Columbia Pike, Falls Church, VA 22041-3050.

Interim changes. Interim changes to this circular are not official unless they are authenticated by the Administrative Assistant to the Secretary of the Army. Users will destroy interim changes on their expiration dates unless sooner superseded or rescinded.

Suggested improvements. Users are invited to send comments and suggested improvements on DA Form 2023 (Recommended Changes to Publications and Blank Forms) directly to Commander, Military Traffic Management Command, ATTN: MTRM-B, 5611 Columbia Pike, Falls Church, VA 22041-3050.

Proponents and Exceptions. The proponent of this circular is the Assistant Secretary of the Army (Financial Management). ASA(FM) has the authority to approve exceptions to this regulation. Only exceptions that are consistent with controlling law, regulation may be approved. The ASA(FM) may delegate this authority in writing to a vision chief within OSA(FM) who holds grade of at least colonel or the civil equivalent. The approval authority will coordinate all questions regarding the scope of authority to grant exceptions with HOD OTIAG, ATTN: DAJA-AL, Washington, DC 20310-1200.

Distribution. Distribution of this circular has been made in accordance with speed mailing lists.

Contents (Listed by paragraph and page number)

- Purpose • 1, page 1
- Reference • 2, page 1
- Explanation of abbreviations and terms • 3, page 1
- Geographic rate structure • 4, page 1
- Application of rates • 5, page 1
- Special cargo rates • 6, page 1

This circular supersedes DA Circular 55-91-1, 1 October 1991.

68

DA CIR 55-92-1 • 30 September 1992

UNCLASSIFIED

1. Purpose

This circular provides the FY 1993 Army Industrial Fund billing rates for cargo port handling services provided to DOD shippers by the Military Traffic Management Command (MTMC).

2. Reference

Required and related publications and prescribed and referenced forms are listed in appendix A.

3. Explanation of abbreviations and terms

Abbreviations and special terms used in this circular are explained in the glossary. The terms are defined as they normally would be in a container context or environment.

4. Geographic rate structure

Rates are established for five billing areas:

- MTMC Eastern Area, Atlantic coast, Gulf ports, and the Great Lakes.
- MTMC Western Area, Pacific coast ports.
- Caribbean, Panama, Central America, and the Caribbean Islands.
- MTMC Europe, Belgium, Federal Republic of Germany, Italy, and the Netherlands.
- MTMC Far East, Japan and Korea.

5. Application of rates

Table 1 describes the basic cargo commodity groups. Tables 2 through 7 list rates applicable to commodities moving under the control of MTMC through military and commercial ocean terminal facilities; rates are per measurement ton (MTON). In addition to the basic transshipment rates in tables 2 and 3, other charges for special handling may be applicable as specified in tables 6 and 7. When class A explosives have been or are being worked in the immediate area, all cargo loaded will be billed at the explosive rate.

a. Table 2 rates apply to port handling services for export shipments moving through continental United States (CONUS) and overseas ocean terminal facilities.

b. Table 3 rates apply to port handling for services for import shipments moving through CONUS and overseas ocean terminal facilities.

c. Table 4 and 5 rates will be applied for services performed by MTMC in connection with releasing, booking, documenting, and expediting all offshore, intercoastal and coastal export and import berth term shipments.

d. Table 6 and 7 rates for special handling will be assessed in addition to charges applicable under the provisions of tables 2 and 3. Billing charges will be based on cube of cargo actually packed.

6. Special cargo rates

When a rate is required for a commodity or a special movement for which no rate has been established, the MTMC area commander, receiving the requirement, will submit a recommended rate to the Commander, MTMC, ATTN: MTRM-B, for approval.

Table 1
Basic cargo commodity billing groups

Code	Description
10	Aircraft, unboxed. Whole aircraft or complete fuselages whether or not engines are installed. Does not include spare parts, engines, aircraft repair supplies, or boxed aircraft.
20	Explosives, Explosives and chemicals, bombs, fuses, TNT blocks, caps, hand grenades, powder, dynamite, or any other commodity, such as dangerous gases and radioactive materials which must be allocated isolated storage space in a cargo ship or be carried on an ammunition ship or discharged at an ammunition pier, or that requires other special handling because of a highly explosive or otherwise dangerous nature. Does not include pure or small arms ammunition.
25	Military-owned demountable containers (MILVANS) packed with explosives. Explosives placed in containers are classified as containers. MTONA recorded and billed to the sponsor for MILVANS will be applied to the gross cube (1,280 cubic feet or 32 MTONA) of the container.
30	Bulk, unpacked dry or liquid cargo that is shipped in large quantities such as coal, grain, ore, sulphur, fertilizer, and edible oils.
40	General cargo (cargo, not otherwise specified). All classes of cargo for which specific commodity classifications are not established. This will include but will not be limited to small arms and small arms ammunition and metal barrels (drums, 10-14 cubic feet, loaded). Also includes unboxed cargo, bagged and sacked products, canned goods, beverages, and wine and baby tanks. Includes all mail and parcel post transshipped in sacks.
41	Wood products, unboxed. All lumber, plywood, logs, poles, and piling as identified in but not limited to the standard stevedore contract.
43	Metal products, unboxed. Angles, bars, beams, billets, blooms, channels, ingots, pigs, plates, rails, rods, sheets, sheet piling—laminated and nonlaminated.
44	Cargo transporters. All cargo transporters including container express (CONEX), loaded or empty. Household goods placed in containers are classified as containers. Retrograde empty containers will be billed to the sponsor according to AR 35-170. Actual contents of containers will be designated as necessary to comply with funding and reporting requirements.
45	MILVANS (other than explosives). All MILVANS packed with other than explosives and empty MILVANS. General cargo, mail, or other commodities placed in containers are classified as containers. MTONA recorded and billed to the sponsor for MILVANS will be applied to the gross cube (1,280 cubic feet or 32 MTONA) of the container.
47	Household goods (HHG). HHG packed in boxes, barrels, crates, footlockers, and trunks. Does not include HHG packed in CONEX. Includes personal baggage shipped separately or not immediately accompanying the owner, such as guns, suitcases, footlockers, boxes, bags, and other luggage. Does not include hand baggage that is carried by passengers or placed in cabin or baggage packed in CONEX.
50	Refrigerated cargo. All chill and freeze perishable foods and other cargo requiring refrigeration. Includes both chill and freeze for Navy fleet and bulk storage and commercial berth term shipments.
60	Heavy Government vehicles and equipment, unboxed, over 10,000 pounds. All unboxed Government equipment and vehicles weighing over 10,000 pounds. Includes wheeled road construction equipment and boats. (Excludes track vehicles.)
61	Government vehicles and equipment unboxed, up to and including 10,000 pounds. All unboxed Government vehicles up to 10,000 pounds. Includes wheeled unboxed road construction equipment and boats.

Table 1
Basic cargo commodity billing groups—Continued

Code	Description
92	Privately owned vehicles (POVs), unboxed. Privately owned automobiles of military personnel, dependents, DOD civilians, and other authorized persons.
96	Tracked vehicles and equipment. All unboxed tracked and semi-tracked Government vehicles and construction equipment regardless of weight.
70	Commercial water highway lift—Alaska (other than POVs). Includes cargo programmed separately to and from Alaska through MTMC Terminal Unit Pacific Northwest. Export cargo is offered on the port call file; the shipment is directed by MTMCNA and commercial line-haul funds allotted to the terminal. Cargo so identified will be billed to the sponsor at a special rate. Includes berth rent reefer vans and arctic resupply. Also includes similar seawater through Government bill of lading operations as they develop the east and gulf coasts.
70	Pack into or unpack cargo from CONEX. Represents basic commodities that were packed into or unpacked from CONEX containers.
72	Commercial water highway lift—Alaska (POVs). Similar to code 70 but applicable to POVs only.
73	Commercial- or Government-owned (or leased) shipping containers (SEAVANs). Represents cargo vans for all van companies that are packed by vendors, decoys, van companies or MTMC terminals by use of in-house or military terminal contractors.
75	Unitization of cargo—general. Represents all types of basic commodities that were unitized, palletized, or placed in tri-walls.
76	Unitization of cargo—explosives. Represents explosives that were unitized, palletized, or placed in tri-walls.
77	Pack cargo into or unpack cargo from SEAVANs. Represents all types of basic commodities (except codes 50, 60, 81, and 82) that were packed into or unpacked from SEAVANs.
79	Pack into or unpack vehicles from SEAVANs. Represents basic codes 60, 61, and 62 that were packed into or unpacked from SEAVANs.
80	Privately owned vehicles (POV) processing. Receipt, documentation, and processing and loading and unloading of POVs to and from car carriers.
83	Frustrated cargo. Represents all types of export basic commodities reshopped to the source or delayed in port due to embargoes on overseas destinations, improper marking or lack of valid transportation account codes (TAC) on documentation. Special charges assessed in handling frustrated cargo.
84	Pack into or unpack from MILVANs—privately owned vehicles. Represents POVs (code 62) that were packed into or unpacked from MILVANs.
85	Pack into or unpack from MILVANs—general cargo. Represents all general type commodities that are packed into or unpacked from MILVANs. Excludes POVs (code 62) and explosives (code 20).
86	Pack into or unpack from MILVANs—explosive cargo. Represents explosives (code 20) that were packed into or unpacked from MILVANs.
87	Pack refrigerated cargo (code 50) into or unpack from SEAVANs. Represents basic code 50 only.
88	Pack or unpack Army and Air Force Exchange Service (AAFES) cargo. Represents AAFES warehouse cargo handled at MTMC Western Area.

Table 2
Billing Rates for Export Shipments (other than Berth Term)

Code	Commodity Description	Eastern area	Western area	Per Measurement Ton EUR	Carb- ben	FE
10	Aircraft (unboxed)	\$ 6.21	\$ 19.72	\$ 5.38	—	\$ 4.75
20	Explosives	124.25	103.98	72.00	—	33.50
25	MILVANs-Explosives ¹	31.19	40.99	15.50	—	19.95
30	Bulk	10.84	6.41	5.31	—	21.42
40	General Cargo	74.94	114.80	64.87	\$140.18	31.97
41	Wood products (unboxed)	77.28	98.60	83.55	—	30.12
43	Metal products (unboxed)	39.13	112.75	73.20	—	41.63
44	Cargo transporters/CONEX (loaded or empty) ¹	32.20	49.25	15.71	16.43	15.85
45	MILVANs—except explosives ¹	19.50	39.27	11.03	—	16.03
47	HHG (includes baggage)	45.62	128.51	38.69	—	31.42
50	Refrigerated cargo	28.50	52.42	23.13	—	—
60	Heavy Government vehicles over 10,000 pounds	26.10	35.82	12.40	6.89	13.08
61	Government vehicles 10,000 pounds or less	24.24	45.70	23.07	13.98	12.99
62	Privately owned vehicles	24.68	78.94	17.96	32.17	28.20
96	Tracked vehicles	24.82	37.95	21.83	6.89	20.53
73	SEAVANs (Consists of documentation and G&A overhead only)	9.30	9.75	5.10	7.89	11.10

Notes:
¹ Billing based on cube produced by outside dimensions of the MILVAN or CONEX.

Table 3
Billing Rates for Import Shipments (other than Berth Term)

Code	Commodity Description	Eastern area	Western area	Per Measurement Ton		
				EUR	Caribbean	FE
10	Aircraft (unboxed)	\$ 9.90	\$ 4.85	\$ 3.01	—	\$ 2.39
20	Explosives	106.50	102.85	80.02	—	27.35
25	MILVANS-Explosives ¹	24.93	35.81	13.04	—	11.35
30	Bulk	27.79	18.07	5.31	—	18.85
40	General cargo	82.31	77.20	34.30	18.42	20.27
41	Wood products (unboxed)	44.85	82.31	38.21	14.06	14.17
43	Metal products (unboxed)	77.90	108.12	86.09	5.01	18.54
44	Cargo transporters/CONEX (loaded or empty) ¹	21.27	26.06	30.18	8.68	7.56
45	MILVANS-except explosives (including empty) ¹	12.50	18.46	16.23	21.42	17.94
47	HHG (includes baggage)	72.32	103.23	58.32	—	22.61
50	Refrigerated cargo	58.63	44.10	36.47	—	9.99
50	Heavy Government vehicles over 10,000 pounds	17.40	27.62	9.75	9.05	9.33
61	Government vehicles 10,000 pounds and under	18.65	30.71	13.96	10.76	8.87
62	Privately owned vehicles	25.12	23.76	15.79	—	14.23
66	Tracked vehicles	18.35	27.59	15.73	9.05	19.57
73	SEAVANS (Consists of documentation and G&A overseas only.)	9.12	10.71	4.25	9.01	10.04

Notes:

¹ Billing based on cube produced by outside dimensions of the MILVAN or CONEX.

Table 4
Berth Term Shipments and through Government bill of lading shipments

	Eastern area	Western area	Per Measurement Ton		
			EUR	Caribbean	FE
Export					
Aircraft (Berth)	\$10.75	—	—	—	—
Vehicles ¹	7.84	10.41	8.75	7.46	2.07
All other cargo	10.39	12.13	8.21	8.24	2.07
MILVANS	7.02	5.99	8.52	2.35	2.07
Import					
Aircraft (Berth)	10.75	—	—	—	—
Vehicles ¹	10.34	8.21	8.75	8.69	2.07
All other cargo	19.81	12.87	7.25	6.75	2.07
MILVANS	2.92	8.06	1.82	2.43	2.07

Notes:

¹ Includes commodity codes 60, 61, and 62.

Table 5
Through Government bill of lading shipments between MTMCWA and Alaska

Code	Export	Import
70	All other cargo	13.34
72	Privately owned vehicles	13.38

Table 6
Special Handling Charges—Export

Code	Export	Per Measurement Ton		
		Eastern area	Western area	Caribbean
71	Packing CONEX	52.14	128.93	39.83
75	Unitizing for Export	—	—	—
76	(Tri-wall & Palletize)	27.85	35.48	—
78	Explosives	—	—	—
78	(Tri-wall & Palletize)	46.75	10.81	—

Table 6
Special Handling Charges—Export—Continued

Code	Export	Per Measurement Ton			
		Eastern area	Western area	EUR	Caribbean
77	Packing SEAWANs (All other cargo)	40.55	27.54	19.09	\$ 6.58
79	Packing SEAWANs (Vehicles)	19.99	18.74	14.53	6.01
80	POV Processing	3.76	—	—	—
83	Frustrated Cargo ¹	18.27	7.56	—	21.57
84	Packing MILVANs (POVs)	19.93	8.75	18.97	—
85	Packing MILVANs (All other cargo)	89.64	28.15	39.38	—
86	Packing MILVANs (Explo)	85.55	54.97	—	—
87	Packing SEAWANs (Refrig Cargo)	27.75	32.87	26.29	—
88	Pack/Unpack AAPES Cargo	—	13.37	—	—

Notes:

¹ Minimum charge is the rate for one MTON.

Table 7
Special Handling Charges—Import

Code	Export	Per Measurement Ton			
		Eastern area	Western area	EUR	Caribbean
71	Unpacking CONEX Unitizing for Export	32.10	21.58	20.75	—
75	(Tri-wall & Palletize) Explosives	15.70	8.78	—	—
76	(Tri-wall & Palletize)	47.55	10.81	—	—
77	Unpacking SEAWANs (All other cargo)	31.35	17.66	41.19	28.15
79	Unpacking SEAWANs (Vehicles)	34.64	13.46	21.42	19.03
80	POV Processing	4.25	7.67	—	—
83	Frustrated Cargo ¹	18.75	—	—	—
84	Unpacking MILVANs (POVs)	11.13	10.65	13.13	—
85	Unpacking MILVANs (All other cargo)	19.13	4.74	36.63	4.23
86	Unpacking MILVANs (Explosives)	190.67	—	—	—
87	Packing SEAWANs (Refrig Cargo)	11.95	6.34	5.40	7.51
88	Pack/Unpack AAPES Cargo	—	6.16	—	—

Notes:

¹ Minimum charge is the rate for one MTON.

Appendix A References

Section I Required Publications

AR 55-170

Apportionment, Manifesting, and Billing for Ocean
Transportation and Port Handling of Empty CONEX Containers
(Cited in table 1.)

Section II Related Publications

A related publication is merely a source of additional information. The user does
not have to read it to understand the publication.

There are no entries in this section.

Section III Prescribed Forms

There are no entries in this section.

Section IV Referenced Forms

There are no entries in this section.

Glossary

Section I Abbreviations

AAFS

Army and Air Force Exchange Service

CONEX

container express

CONUS

continental United States

DOD

Department of Defense

HHG

household goods

G&A

general and administrative

MILVAN

military-owned demountable container

MTMC

Military Traffic Management Command

MTON

measurement ton

POV

privately owned vehicle

SEAVAN

commercial- or Government-owned (or leased) shipping container

TAC

transportation account code

Section II Terms

All other cargo

All cargo for which the Army accepts shipping responsibility except that classified as support or foreign assistance; cargo consigned to the resident engineer for Corps of Engineers construction projects; and cargo of the Navy, other U.S. Government agencies, Red Cross, privately owned commercial shipments, and so on.

Berth term

A contract for ocean carriage (coastal, inter-coastal and offshore) of cargo on commercial vessels operating on regularly scheduled berth or liner service based on a published trade route (including loading and discharging costs). Rates are in accordance with the published conference or company tariff and with specific commodities for which an ocean bill of lading is the contract.

Berth term shipment rate

Charges for services performed by MTMC in connection with releasing, booking, documenting, and expediting all offshore, inter-coastal and coastal export and import shipments moving under commercial berth term rates.

Commercial- or Government-owned (or leased) shipping container

Commercial- or Government-owned (or leased) shipping container that is moved via ocean transportation without bogey wheels attached; that is, lifted on and off the ship. This term as used in this publication is synonymous with container. A container is an article of transport equipment designed to be transported by various modes of transportation, having an interior volume of 400 cubic feet or more, and designed to facilitate and optimize the carriage of goods by one or more modes of transportation without intermediate handling and transfer from one mode to another. Containers may be fully enclosed with one or more doors, open top, tank, refrigerated, open rack, gondola, and other designs. Also referred to as van.

Container express

a. Code name that identifies the operation of cargo transporters in a worldwide service under the control of the Joint CONEX Control Agency.

b. A reusable, serially-controlled, metal container for shipment of troop support cargo, quasi-military cargo, household goods, or personal baggage.

Dangerous cargo and label cargo

Hazardous cargoes which must be clearly labeled in accordance with current Coast Guard regulations including—

a. Dangerous cargo. Ammunition and explosives will be handled only through ammunition and explosives loading areas specified by higher authority.

b. Labeled cargo.

(1) Red Label—flammable liquids and gases.

(2) Yellow Label—flammable solids and oxidizing materials.

(3) White Label—acids, corrosives, or alkaline caustic liquids.

(4) Green Label—nonflammable gases.

(5) Radioactive material label.

Measurement ton

Measurement of cubic volume of cargo, expressed in units of 40 cubic feet. It is also used to indicate the cubic capacity of a ship available for cargo. Also known as ship ton.

Military-owned demountable container

Military-owned container conforming to United States and international standard and operated as a centrally controlled fleet for movement of military cargo.

Shipment

A shipment is a quantity of supplies, materials or equipment covered by an individual shipping document, originating from shipper agency at one origin point and destined to one consignee at final destination.

Shipment unit

One or more line items shipped to one consignee under one key transportation control number.

Shipping contract (space charter)

A negotiated contract of rates covering routes or ocean carriage of cargo (load and unloading cost excluded) on commercial vessels operating on a regular scheduled basis to or from specific world trade areas of interest.

Terminal cargo transshipment rates

The commodity rate to be assessed on any individual shipment moved through the dock and vessel area at a terminal facility, loaded onto a vessel and all shipments of cargo charged from a vessel.

Through Government bill of lading

A bill of lading that is issued by a DOD activity to document overseas, intermodal through movement of cargo from initial point of origin to final destination.

Transportation unit

One or more shipment units moving a single conveyance under one key transportation control number.

Section III Special Abbreviations and Terms

This section contains no entries.

APPENDIX E

Military Sealift Command

Central Technical Activity

Washington Navy Yard

Washington, D.C. 20396-5541

RG-38 (Cancels RG-36)

Second Cycle, RFP-2400



Standard
20

40 x 8 x 8.6 internal

39 L 7 9 2 7.10 2 63 3 internal

MSC Container Agreement & Rate Guide

Effective 1 October 1992

75

(Except as otherwise provided herein)

APPENDIX F

WAREHOUSE LOADING WORKSHEET FOR FISC GUAM: N61119							
SHIPMENT # 03:				VAN A1		VAN NO.	
CUT OFF	SDD	ETA	RDD	ATMOSPHERE	VAN TEMP	HUMIDITY	
01/19/94	01/20/94	01/31/94	01/31/94	CONTROLLED	33 F	90 TO 95 %	
CARRIER		SHIP		TCN		VAN NO. SEAL NO.	
APL 80051719		PRES MONROE		V108 SCGA084020V016MP5		520/96 448735	
USOA WAREHOUSE VAN LOADING SEQUENCE				CUSTOMER DELIVERY SEQUENCE			
LOAD 1'ST: HQCWHY				DELIVER 1'ST: N61119			
LOAD 2'ND: HQCWHZ				DELIVER 2'ND: HQCWHZ			
LOAD 3'RD: N61119				DELIVER 3'RD: HQCWHY			

COMMODITY	ITEM CODE	CUBE/CASE	TOTAL CUBE	AVG WT/CS	TOTAL NET WT	CASES
APPLE, RED, FANCY, 12.5 LB B	04042	1.90	57	40	1,200 LB	30
PEAR, 100-150 C	04670	1.75	14	36	298 LB	8

***** SUBTOTALS FOR VAN A1 *****
FOR N61119

CASES	38	LBS	1,488	CUBE	71.00
-------	----	-----	-------	------	-------

DATE REPORT PREPARED: 12/29/93 @ 11:06:02

PAGE 1

SHIPMENT # 03: VAN A1 VAN NO.							
CU	U.S.	DD	ETA	RDD	ATMOSPHERE	VAN TEMP	HUMIDITY
01/19/94	01/20/94	01/31/94	01/31/94	01/31/94	CONTROLLED	33 F	90 TO 95 %
CARRIER		SHIP		TCN		VAN NO. SEAL NO.	
AFB 80051730		PRES MONROE		V108 SCGA084020V016MP5		518186 448735	
DSOA WAREHOUSE VAN LOADING SEQUENCE				CUSTOMER DELIVERY SEQUENCE			
LOAD 1'ST: HQCWHY				DELIVER 1'ST: N61119			
LOAD 2'ND: HQCWHZ				DELIVER 2'ND: HQCWHZ			
LOAD 3'RD: N61119				DELIVER 3'RD: HQCWHY			

COMMODITY	ITEM CODE	CUBE/CASE	TOTAL CUBE	AVG WT/CS	TOTAL WT	CASES HQCWHY
APPLE, GRANNY SMITH,	14024	1.90	23	40	480 LB	12
APPLE, GOLDEN DEL, WA, 80 COUNT	14057	1.90	36	36	684 LB	19
APPLES, RED/DEL 3# BA,	14085	1.90	42	36	792 LB	22
APPLE, RED DEL, 80 COUNT	14094	1.90	86	40	1,800 LB	45
PEAR APPLE (ASIAN PEA,	14145	1.50	30	10	200 LB	20
PEAR, D'ANJOU,	14880	1.70	20	36	432 LB	12

***** SUBTOTALS FOR VAN A1 *****
FOR HQCWHY

CASES	130	LBS	4,388	CUBE	236.60
-------	-----	-----	-------	------	--------

DATE REPORT PREPARED: 12/29/93 @ 11:03:38

PAGE 1

WAREHOUSE LOADING WORKSHEET FOR GUAM DECA CSY: HQCWHZ									
SHIPMENT # 03:				VAN A1			VAN NO.		
CUT OFF	SDD	ETA	ROD	ATMOSPHERE	VAN TEMP	HUMIDITY			
01/19/94	01/20/94	01/31/94	01/31/94	CONTROLLED	33 F	90 TO 95 %			
CARRIER		SHIP		TCN		VAN NO. SEAL NO.			
APL 80051738		PRES MONROE		V108		SCGA084020V016MP5		518/86 448735	
ESOA WAREHOUSE VAN LOADING SEQUENCE					CUSTOMER DELIVERY SEQUENCE				
LOAD 1'ST: HQCWHZ					DELIVER 1'ST: N61119				
LOAD 2'ND: HQCWHZ					DELIVER 2'ND: HQCWHZ				
LOAD 3'RD: N61119					DELIVER 3'RD: HQCWHZ				

COMMODITY	ITEM CODE	CUBE/CASE	TOTAL CUBE	AVG WT/CS	TOTAL NET WT	CASES HQCWHZ
APPLE, RED 5# CELLO,	14009	1.90	456	5	1,200 LB	240
APPLE, GRANNY SMITH,	14024	1.90	19	40	400 LB	10
APPLE, JONATHAN, 88 COUNT	14051	1.90	4	40	80 LB	2
APPLE, GOLDEN DEL, WA, 80 COUNT	14057	1.90	19	36	360 LB	10
APPLE, MACINTOSH,	14066	1.90	4	40	80 LB	2
APPLE, RED DEL, 80 COUNT	14094	1.90	38	40	800 LB	20
APPLES, BRAEBURN,	14115	1.90	4	40	80 LB	2
APPLES, GALA,	14120	1.90	4	40	80 LB	2
APPLES, FUGI,	14121	1.90	4	40	80 LB	2
PEAR, RED,	14867	1.75	9	36	180 LB	5
PEAR, D'ANJOU,	14880	1.70	17	36	360 LB	10
PEAR, BOSCH,	14898	1.70	9	36	180 LB	5

***** SUBTOTALS FOR VAN A1 *****
FOR HQCWHZ

DATE REPORT PREPARED: 12/29/93 @ 11:04:44

PAGE 1

91

82

[illegible]

PECS 46107 2.58 1302

9	.00	3.4	3.75	5.5	1
---	-----	-----	------	-----	---

AREA - 17 CA SEAVAN CONSIST PAGE 000 000 100 40 MONROE SEAL NO TEMP
 JAN NO GARR 20 10000 PDE REC M 78 ...SEAVAN TOR... CONSEE P ADD 00 01-5H .PCS. WMT. 100. 448705 03
 MIDW AY 40 11509 300 HAI 7 10 800408402RVD12MRE NO1119 0 031 SEE TOTALS BELOW 448705 03
 RESIDITION NO.017 STOCK NUMBER DESCRIPTION PRJ WGT CUBE UPH PCS UPRICE REC WNS LOCATION TAG 1 17
 1119-4003-100-4487 2415-301340805 PEARLS 700 15 TED 1488 071 44 28 160 4001 GA 00000 81DR

TOTALS
 PIECES WEIGHT CUBE LINES

1119-4003-100 38 1488 71 1

TOTALS
 PIECES WEIGHT CUBE LINES

1119-4003-100 479 9171 394 3

APPENDIX I

SCN0801020010E
 NPS I T C M STATUS REC TCN0 SIOU R00 US USNR ENR CASE FBI CCM
 M SCN0801020010E MAFISTD W02 10195 PCS WT CU FRG FCN LOCH MFD
 USHP EIA APT FDE F00 CASE CUMEX DESC 001/9 009791 00894 ZC 4026
 4026 0025 302 TAI NOCWHY 11509
 DBL FRJ TAC VTCN/VNAME/DELPEA DEL RCVP LSHF LNEO CS 008ER 4026
 FES,MONOE 108 0019 0

ENTER TCN X E For Export or I For Import - NEW QUERY GUIT to end session

PCN E607-0620E PROD. DATE: 94 JAN 26 94026

CARGO MANIFEST

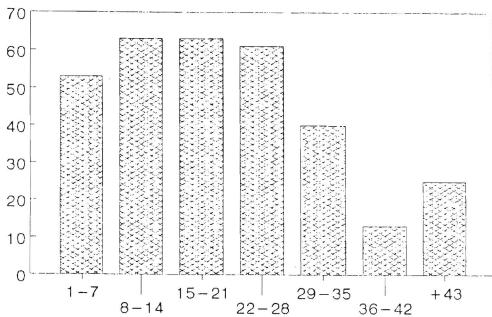
[illegible]

1385	1385
------	------

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	52
--	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	----

APPENDIX K

GBL PRODUCTION
1ST QTR FY 94



APPENDIX L

WAREHOUSE LOADING WORKSHEET FOR ANDERSEN DECA CSY: HQCWHY									
SHIPMENT # 30:				VAN A1			VAN NO.		
CUT OFF		SDD	ETA	RDD	ATMOSPHERE		VAN TEMP		HUMIDITY
06/23/93		06/24/93	07/05/93	07/05/93	CONTROLLED		33 F		90 TO 95 %
CARRIER			SHIP		TCN		VAN NO. SEAL NO.		
APL 80039123			PRES MONROE		V102 SC03084340V005LP5		5991501		
DSOA WAREHOUSE VAN LOADING SEQUENCE					CUSTOMER DELIVERY SEQUENCE				
LOAD 1'ST: HQCWHY					DELIVER 1'ST: N61119				
LOAD 2'ND: HQCWHZ					DELIVER 2'ND: HQCWHZ				
LOAD 3'RD: N61119					DELIVER 3'RD: HQCWHY				

COMMODITY	ITEM CODE	CUBE/ CASE	TOTAL CUBE	AVG WT/CS	TOTAL WT	CASES HQCWHY
APPLE, GRANNY SMITH, 7003	14024	1.90	29	40	600 LB	15
APPLE, GOLDEN DEL, 80 COUNT	14037	1.90	19	40	400 LB	10
APPLE, GOLDEN DEL, WA, 80 COUNT	14057	1.90	15	36	288 LB	8
APPLES, RED/DEL 3# BA,	14085	1.90	38	36	720 LB	20
APPLE, RED DEL, 80 COUNT	14092	1.90	38	40	800 LB	20
APPLE, RED DEL, 80 COUNT	14094	1.90	57	40	1,200 LB	30
PEAR APPLE (ASIAN PEA,	14145	1.50	24	10	160 LB	16
APPLE, RED DELICIOUS, BAG 10	14146	1.90	228	5	600 LB	120
PEAR, D'ANJOU,	14880	1.70	26	36	540 LB	15
LETTUCE,	16310	2.30	184	30	2,400 LB	100

***** SUBTOTALS FOR VAN A1 *****
FOR HQCWHY

CASES 338 LBS 7,708 CUBE - 632.20

338 8148 679

Total 553 23444 1511

DATE REPORT PREPARED: 06/14/93 @ 13:36:18

Michael Sinter
7 Pallets

APPENDIX M

INR 00000
 1 012335Z JUL 93
 FROM DPSC PHILADELPHIA//PA//DPSC-NTS//
 TO PUNGH//II/NSO GUAM 60//CODE 30466//
 PUNGH//II/DECA COMSY NS 60//DECA//NW//HA//GJA//
 INW//II/CH PT//CTV MECO//D 60//PASS TO OCEAN CARRIER//
 INW//II/DECA NORTHWEST PACIFIC RGN FT LEWIS WA//DECA//W// 03160000
 INW//II/DECA ALABAMA CA
 INW//II/DECA LIAISON DPSC PHIL PA//DECA-000L//
 IT
 INCLAS SECTION OCT OF C01.
 ADVANCED PERISHABLE CONSIST DATA SEQUENCE 0415
 THIS PATCH CONTAINS VOYAGE NUMBERS P 4340
 INR VAN-NR SEAVAN-TCN PDE PDD VESSEL-NAME STA CONSGE TEM
 PLS 590150 4340VCC0M3 302 TAI PR MONROE 155 N61119 C
 TEM DESCRIP REQUISITION STOCK NUMBER UPK WGT CUBE PCS UT-PRC RDD
 QTY U/I 59-PRC CS-PRC
 APPLS G/D 6 3164 0552XX 8915C15112720 40 3726 449 228 .00 186
 ITEM NUMBER ==> 14037 9120 LB .30
 APPLS G/D 6 3164 0552XX 8915C15112720 40 3726 449 228 .00 196
 ITEM NUMBER ==> 14037 9120 LB .70
 TOTALS WGT-1017452 CUBES-600492 PCS-700456
 INR VAN-NR SEAVAN-TCN PDE PDD VESSEL-NAME STA CONSGE TEM
 PLS 590150 4340VCC0M3 302 TAI PR MONROE 155 N61119 C
 TEM DESCRIP REQUISITION STOCK NUMBER UPK WGT CUBE PCS UT-PRC RDD
 QTY U/I 59-PRC CS-PRC
 LUMS 3164 0420XX 8915C11268306 25 738 32 33 1.13 196
 ITEM NUMBER ==> 04734 825 LB 23.25
 LUMS 3164 0420XX 8915C11268306 25 738 32 33 1.13 196
 ITEM NUMBER ==> 04734 825 LB 23.25
 TOTALS WGT-1001476 CUBES-600064 PCS-700064
 INR VAN-NR SEAVAN-TCN PDE PDD VESSEL-NAME STA CONSGE TEM
 PLS 590150 4340VCC0M3 302 TAI PR MONROE 155 N61119 C
 TEM DESCRIP REQUISITION STOCK NUMBER UPK WGT CUBE PCS UT-PRC RDD
 QTY U/I 59-PRC CS-PRC
 PLS 590150 4340VCC0M3 302 TAI PR MONROE 155 N61119 C
 TEM DESCRIP REQUISITION STOCK NUMBER UPK WGT CUBE PCS UT-PRC RDD
 QTY U/I 59-PRC CS-PRC
 PLS 590150 4340VCC0M3 302 TAI PR MONROE 155 N61119 C
 TEM DESCRIP REQUISITION STOCK NUMBER UPK WGT CUBE PCS UT-PRC RDD
 QTY U/I 59-PRC CS-PRC

91

RTM 6607-0620X PROO DATE: 93 JUN 30 93181

CARGO MANIFEST

4562

PLM EAST OVALB. FROM DATE: 93 JUN 30 93101

CARGO MANIFEST

DATE	TIME	ORIGIN DATA		DEST CODE	CITY	DESTINATION DATA		CITY	TIME	STATUS	COUNTRY	AIRLINE	FLIGHT	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL	STATUS	REMARKS	CARRIER	CLASS	SEAT	FARE	TAXES	TOTAL
------	------	-------------	--	-----------	------	------------------	--	------	------	--------	---------	---------	--------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------	--------	---------	---------	-------	------	------	-------	-------

APPENDIX O

GOVERNMENT BILL OF LADING CORRECTION NOTICE			DATE NOTICE PREPARED
			30 JUL 93
1. GBL NUMBER C-7799129	2. DATE GBL WAS ISSUED 19 JUL 93	3. TOTAL WEIGHT SHOWN ON GBL	
4. ORIGIN (As shown in "Origin" block on GBL.) APLS TERMINAL OAKLAND, CA (3D2)		5. DESTINATION (As shown in "Destination" block on GBL.) GUAM MARTIANAS ISLANDS (Tall)	
6. ROUTE (Complete routing shown on GBL.)		7. ISSUING OFFICE (As shown on GBL under "For Use of Issuing Office.") MTWAOP-TO-C, OCCA DIVISION OARS, OAKLAND, CA 94626-5000	
8. TO: (Name and address of carrier/activity to which directed, including ZIP Code.) AMERICAN PRESIDENTIAL LINES ATTN: MARILYN SEMPRIMOZNIK 1579 MIDDLE HARBOR ROAD P.O. BOX 23190 OAKLAND, CA 94607			9. Complete Items 9a, b, and c only when correction is made after transportation charges have been paid. a. D.O. VOUCHER NUMBER b. D.O. VOUCHER DATE c. D.O. SYMBOL
10. FROM: (Full name and address of the activity initiating the notice, including ZIP Code.) CDR MTMCWA MTW00-TO-C, SIYXIS OCCA DIVISION OARS, OAKLAND, CA 94626-5000			
11. BILL OF LADING NOW READS (Show the information as it reads prior to correction.) 5 VANS-THIS GBL IS ISSUED FOR 1 SHIPMENT CONSISTING OF A TOTAL OF 56 CONTAINERS AS DESCRIBED ON THE ATTACHED MSC PAC SHIPMENT DESCRIPTION.		12. CORRECT BILL OF LADING TO READ (Show how the corrected information should read.) 56 VANS-THIS GBL IS ISSUED FOR 1 SHIPMENT CONSISTING OF A TOTAL OF 56 CONTAINERS AS DESCRIBED ON THE ATTACHED MSC PAC SHIPMENT DESCRIPTIONS.	
13. AUTHORITY FOR CORRECTION (Tariff and item numbers, classification and item number, or other authority for making the change.) S1 ADDITIONAL VANS			
14. REMARKS (Furnish information not otherwise provided on the form. If more space is required, use reverse side of this form.) PRESIDENT MONROE V-102 P-4340			
15. INFORMATION COPY TO (Name and address, including ZIP Code.) MSCO PT322 GUAM APLS OCCA		16. SIGNATURE AND TITLE OF INITIATING OFFICIAL BERNARD GONZALEZ CHIEF OCCA DIVISION 17. CARRIER REPRESENTATIVE'S SIGNATURE (Require when notice is received by shipper and transportation charges are affected.)	

RE PRODUCE AT GOVERNMENT EXPENSE

Military Traffic Management Command - WA, Oakland CA 94626

Van	Description	Item	Wgt	Cube	Cost/Basis
V # V011	SZ 40 TERMS LP5		-----	-----	-----
Totals:			13,800	663	\$ 4,401.00
APLU 598689	FOOD, CHILLED	1047	25352	1057	4401.00 PC
V # V010	SZ 40 TERMS LP5		-----	-----	-----
Totals:			25,352	1,057	\$ 4,401.00
APLU 598880	FOOD, CHILLED	1047	12491	714	4401.00 PC
V # V007	SZ 40 TERMS LP5		-----	-----	-----
Totals:			12,491	714	\$ 4,401.00
APLU 599022	FOOD, CHILLED	1047	18270	795	4401.00 PC
V # V006	SZ 40 TERMS LP5		-----	-----	-----
Totals:			18,270	795	\$ 4,401.00
APLU 599130	FOOD, CHILLED	1047	23446	1511	4401.00 PC
V # V005	SZ 40 TERMS LP5		-----	-----	-----
Totals:			23,446	1,511	\$ 4,401.00
GSTU 650114	AUTOMOBILES	730	5500	780	3000.00 VE
V # V014	SZ 40 TERMS L12		-----	-----	-----
Totals:			5,500	780	\$ 3,000.00
APLS 700292	BEVERAGES & WATER	105	35504	918	1700.00 MW
V # V018	SZ 40 TERMS K12		-----	-----	-----
Totals:			35,504	918	\$ 1,700.00
APLU 701832	BLOCKS, BRICKS, SLAB	108	351	18	13.51 W
APLU 701832	DRY GOODS	255	330	560	1815.00 C
APLU 701832	AIRCRAFT PARTS	27	9	2	3.40 C
APLU 701832	HARDWARE & SUPPLIES	340	200	8	12.20 C
APLU 701832	IRON & STEEL NOS	375	16	4	7.71 C
APLU 701832	IRON & STEEL, VIZ.	376	302	7	11.90 C
APLU 701832	KITCHENWARE, UTENSILS	465	12	3	5.53 C
APLU 701832	MACHINERY NOS	505	149	4	9.00 C
APLU 701832	MACHINERY, AV, TV, E	506	524	21	47.25 C
APLU 701832	PAPER PRODUCTS, VIZ.	550	440	23	40.25 C
APLU 701832	PLASTIC ARTICLES NOS	605	736	55	96.25 C
APLU 701832	TIRES & TUBES	693	1375	340	213.74 W
V # V003	SZ 40 TERMS L12		-----	-----	-----
Totals:			5,045	1,045	\$ 2,277.76
APLS 702325	FREIGHT ALL KINDS	785	27710	1933	4377.00 PC
V # V001	SZ 40 TERMS M12		-----	-----	-----
Totals:			27,710	1,933	\$ 4,377.00
APLU 703980	DRY GOODS	255	216	14	38.50 C
APLU 703980	FURNITURE, NOS	310	617	46	111.54 C

2.
93

1

SUMMARY FREIGHT CHARGES
OCEAN CARRIAGE
AND
ACCESSORIAL CHARGES

VAN	WGT	CUSE	OCEAN CHARGES	SZ	U. S. WHARF CHARGES	GUAM WHARF CHARGES	REF CHG	STOP OFF
** VESSEL 4340 PRES MONROE VLOZ								
APLS 113953	35504	914	1700.00	MW	40	114.25	437.50	0
APLU 113803	750	1500	4125.00	C	40	187.50	437.50	0
ICSU 126803	17554	975	2200.00	W	40	75.11	437.50	0
ICSU 136283	38234	881	2200.00	W	40	75.47	437.50	0
ICSU 145895	6150	1126	3000.00	VE	40	50.00	437.50	0
APLS 146431	35504	913	1700.00	MW	40	114.75	437.50	0
APLS 158694	39942	1033	1700.00	MW	40	129.12	437.50	0
ICSU 172133	38214	1193	2200.00	W	40	76.43	437.50	0
APLU 173533	44380	1143	1886.15	MW	40	143.50	437.50	0
ICSU 174791	39560	1100	2200.00	W	40	79.12	437.50	0
APLU 279029	6850	694	2190.00	PC	20	86.75	392.60	0
TRIU 426171	5950	780	3000.00	VE	40	50.00	437.50	0
TRIU 426614	38425	946	2200.00	W	40	75.85	437.50	0
APLS 430364	39942	1033	1700.00	MW	40	129.12	437.50	0
APLU 501070	60000	2400	4401.00	PC	40	300.00	437.50	0
APLU 524071	14625	569	4401.00	PC	40	71.12	437.50	0
APLU 580168	25900	796	4401.00	PC	40	99.50	437.50	0
APLU 591117	32312	1010	4401.00	PC	40	126.25	437.50	0
APLU 593483	31234	1373	4401.00	PC	40	195.62	437.50	C/A
APLU 598600	15755	829	4401.00	PC	40	101.62	437.50	C/A
APLU 598658	13800	663	4401.00	PC	40	82.88	437.50	C/A
APLU 598699	25352	1057	4401.00	PC	40	132.12	437.50	C/A
APLU 598880	12491	714	4401.00	PC	40	89.25	437.50	C/A
APLU 599022	18270	795	4401.00	PC	40	99.38	437.50	C/A
APLU 599150	21446	1511	4401.00	PC	40	188.88	437.50	C/A
GSTU 650114	5500	730	3000.00	VE	40	50.00	437.50	0
APLS 700292	35504	913	1700.00	MW	40	114.75	437.50	0
APLU 701832	2513	787	2048.51	C	40	93.38	437.50	0
APLU 701832	2227	258	229.25	W	40	4.45	0.00	0
APLS 702325	27710	1959	4377.00	PC	40	244.88	437.50	0
APLU 703980	11285	1195	3551.14	C	40	149.38	437.50	0
APLU 703980	590	53	67.84	W	40	1.13	0.00	0
APLU 705384	15494	1943	5495.00	PC	40	243.50	437.50	0
APLS 705287	3764	1474	4568.40	C	40	184.25	437.50	0
GSTU 716567	5575	600	3000.00	VE	40	50.00	437.50	0
APLU 801139	38504	913	1700.00	MW	40	114.75	437.50	0
APLS 801834	39942	1033	1700.00	MW	40	129.12	437.50	0
APLU 802426	12403	832	2218.15	C	40	104.00	437.50	0
APLU 802426	1921	55	170.47	W	40	3.84	0.00	0
APLS 802799	3105	422	1218.52	C	40	52.75	437.50	0
APLS 802799	37090	2324	1738.15	W	40	74.13	0.00	0
APLU 803021	3421	140	220.08	BF	40	17.50	437.50	0
APLU 803021	11925	714	1567.86	C	40	89.25	0.00	0

REPRODUCED FROM GOVERNMENT EXPENSE

2.
/93

SUMMARY FREIGHT CHARGES
OCEAN CARRIAGE
AND
ACCESSORIAL CHARGES

VAN	WGT	CUBE	OCEAN CHARGES	SZ	U. S. WHARF CHARGES	GUAM WHARF CHARGES	REF CHG	STOP OFF
AFLU 801021	15106	442	581.58	W 40	30.21	0.00		0
APLS 801604	35504	913	1700.00	MW 40	114.75	437.50		0
GSTU 365484	37119	912	2200.00	W 40	74.24	437.50		0
APLU 830885	13796	1065	2757.72	C 40	133.12	437.50		0
APLU 830885	4663	130	198.18	W 40	9.33	0.00		0
APLS 881296	44380	1148	1886.15	MW 40	143.50	437.50		0
APLS 885072	35504	918	1700.00	MW 40	114.75	437.50		0
APLU 886353	4642	180	282.96	BF 40	22.50	437.50		0
APLU 886353	22851	1320	3013.03	C 40	165.00	0.00		0
APLU 886353	160	3	8.32	W 40	0.32	0.00		0
APLS 888446	18556	576	1162.48	C 40	72.00	437.50		0
APLS 888446	24083	357	1046.39	W 40	48.17	0.00		0
APLU 887915	38312	919	2200.00	W 40	75.62	437.50		0
APLU 964541	39093	1283	2200.00	W 40	78.20	437.50		0
APLU 969244	41575	1166	1351.94	MW 40	145.75	437.50		0
APLU 970502	13769	1451	3522.37	C 40	181.62	437.50		0
APLU 972113	28143	1580	3802.06	C 40	197.50	437.50		0
APLU 972113	94	10	10.81	W 40	0.19	0.00		0
APLU 972327	38999	1634	2200.00	W 40	78.00	437.50		0
APLS 972909	20803	2477	4377.00	PC 40	309.62	437.50		0
APLU 981590	15093	2275	4377.00	PC 40	284.38	437.50		0
APLU 982007	18135	2270	4377.00	PC 40	283.75	437.50		0
APLU 983166	37536	981	2200.00	W 40	75.07	437.50		0
APLS 986331	39942	1033	1700.00	MW 40	129.12	437.50		0
** Subtotal **	1535801	66649	168341.21		7372.46	24455.10		27
** Total **	1535801	66649	168341.21		7372.46	24455.10		27

APPENDIX P

AGENCY, BUREAU OR SERVICE, AND LOCATION SHOWN ON SUBVOUCHERS		BUR. YOU. NO.
COMMANDER MILITARY SEALIFT COMMAND PACIFIC BLDG. 310-S, CODE N822 NSC OAKLAND, CA. 94626-5000		SCHED. NO.
THE UNITED STATES, OR, TO: (Payee's name and address)		PAID BY
AMERICAN PRESIDENT LINES, LTD. ATTN: GOVERNMENT BILLING DEPT. 6162 SOUTH WILLOW DRIVE, STE#100 ENGLEWOOD, CO 80111 PAYABLE TO: 1111 BROADWAY OAKLAND, CA 94607		CARRIER'S BILL NUMBER
		GA654T
		CARRIER'S SCAC NUMBER
		APLS
		SERVICES FURNISHED (Initials and Date)
		<input checked="" type="checkbox"/> FREIGHT <input type="checkbox"/> PASSENGER
Do NOT bill GBL and GTR charges on the same form		For payment of services rendered as evidenced by attached subvouchers.
ALPHA PREFIX AND SERIAL NO. OF SUBVOUCHER	AMOUNT	
MON/102		PAYEE'S CERTIFICATE I certify that the account stated hereon, as evidenced by the attached subvouchers, is correct and just; that services have been rendered or tickets furnished as indicated; that payment has not been received; and that the charges are not in excess of those applicable thereto under (1) tariffs lawfully on file with any Federal or State transportation regulatory agency or (2) rates, fares and charges established pursuant to section 22 of the Interstate Commerce Act, as amended, or other equivalent contract, arrangement, or exemption from regulation. DATE <u>AUGUST 11, 1993</u> PAYEE <u>AMERICAN PRESIDENT LINES, LTD.</u> PER <u>LAURA CARROLL</u> (Signature) <u>GOVERNMENT BILLING DEPARTMENT</u> (Capacity) * When a voucher is signed in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which the person signs, must appear. For example, "A.B.C. Railway Co., per John Doe, Controller," or "Auditor," as the case may be.
QAK/GJAM		
CONTROLLED ATMOSPHERE SERVICE		
7 CONTAINERS @ \$950.00	9450.00	
7 CONTAINERS @ \$400.00		
APLU598483 APLU598600 APLU598658 APLU598689 APLU598880 APLU599021 APLU599150		
GBL# C-7,799,129		
TOTAL CLAIMED ▶	9450.00	AMOUNT VERIFIED—CORRECT FOR ▶ VERIFIED BY (Signature) ▶ PAID BY CHECK NO. ▶

ACCOUNTING CLASSIFICATION

MAINDER
MILITARY SEALIFT COMMAND
PACIFIC BLDG. 310-5, CODE NB22 NSC
OAKLAND, CA. 94626-5000

UNITED STATES, DR., TO: (Payee's name and address)

AMERICAN PRESIDENT LINES, LTD.
ATTN: GOVERNMENT BILLING DEPT.
6162 SOUTH WILLOW DRIVE, STE#100
ENGLEWOOD, CO 80111
PAYABLE TO: 1111 BROADWAY
OAKLAND, CA 94607

CARRIER'S BILL NUMBER

C4634

CARRIER'S SCAC NUMBER

APLS

SERVICES FURNISHED (Type here)

☒ FREIGHT ☐ PASSENGER

SCHED. NO.

PAID BY

Do NOT bill GEL and GTR charges on the same form

NA PREFIX AND SERIAL NO. OF SUBVOUCHER AMOUNT

MON/102

OAK/GUAM

B/L# 070027444

P.O.D.

P.O.E.

200,557.94

11,431.00

4,000.00

632 C-0, 1993 139

For payment of services rendered
as evidenced by attached subvouchers.

PAYEE'S CERTIFICATE

I certify that the account stated hereon, as evidenced by the attached subvouchers, is correct and just; that services have been rendered or tickets furnished as indicated; that payment has been received; and that the charges are not in excess of those applicable thereto under (1) tariff lawfully on file with any Federal or State transportation regulatory agency or (2) rates, fares or charges established pursuant to section 22 of the Interstate Commerce Act, as amended, or other equivalent contract, arrangement, or exemption from regulation.

DATE August 5, 1993

PAYEE: AMERICAN PRESIDENT LINES, LTD.

PER LAURA CARROLL (Signature)

GOVERNMENT BILLING DEPARTMENT (Capacity)

* When a voucher is signed in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which the person signs, must appear. For example: "A.B.C. Railway Co., per John Doe, Controller," or "Auditor," as the case may be.

DIFFERENCES

AMOUNT

AMOUNT VERIFIED—CORRECT FOR ▶

VERIFIED BY

(Signature or initials) ▶

TOTAL CLAIMED ▶

215,988.94

PAID BY CHECK NO. ▶

ACCOUNTING CLASSIFICATION

03.01.94 18:56

APPENDIX Q

--- NPS Code 38

2001

GRID K 10

MILITARY SEALIFT COMMAND

STATEMENT OF CARGO TRANSPORTATION CHARGES

2014082

PRODUCTION DATE 28/07/93

FISCAL YEAR 93

CUSTOMER CODE 00370 TITLE SPIC-8 (PROJECT PHOETHN)
2800 3D, 20TH ST.
PHILADELPHIA, PA 19101

DPS

TCN	PNLZ	SECT	CMB-	CMB	A/	A/	WCC	MT	CUBE	RATE	AMOUNT	ERROR	VOY	SHIP	TATA	CC	PP
CD	DATE	NUMBER	STATION	POB	POB							TAC	NR	NAME	PEPD	CC	CD
TAC STMP																	
HCCWY315910A00000	930701	HCCWY	800100	306	TAT	505	64380	1148	134.65	7922.14				P43248LHAYIGATA	0329	60	CS
HCCWY315910A07000	930701	HCCWY	800100	306	TAT	505	64380	1148	134.65	7922.14				P43248LHAYIGATA	0329	60	CS
HCCWY316470000000	930624	HCCWY	800200	302	TAT	113	8148	6079	177.25	1541.55				P43400PHOETHN	0329	11	PC
HCCWY316470000000	930624	HCCWY	800200	302	TAT	113	7482	6351	177.25	1317.15				P43400PHOETHN	0329	11	PC
HCCWY316470000000	930624	HCCWY	800200	302	TAT	123	6158	6019	177.25	2107.79				P43400PHOETHN	0329	11	PC
HCCWY316470000000	930624	HCCWY	800200	302	TAT	123	645	6148	177.25	1960.40				P43400PHOETHN	0329	11	PC
HCCWY316470000000	930624	HCCWY	800200	302	TAT	113	6397	6342	177.25	1074.13				P43400PHOETHN	0329	11	PC
HCCWY316470000000	930624	HCCWY	800200	302	TAT	123	6050	6014	177.25	2143.14				P43400PHOETHN	0329	11	PC
HCCWY316470000000	930624	HCCWY	800200	302	TAT	113	13768	6435	177.25	3309.43				P43400PHOETHN	0329	11	PC
HCCWY316470000000	930624	HCCWY	800200	302	TAT	113	7470	6345	177.25	1303.57				P43400PHOETHN	0329	11	PC
HCCWY316470000000	930624	HCCWY	800200	302	TAT	123	3042	6223	177.25	2492.43				P43400PHOETHN	0329	11	PC
HCCWY316700100000	930703	HCCWY	800100	302	TAT	512	64397	1384	134.65	7920.11				P4378PLINCBLN	0329	60	CS
HCCWY316700100000	930703	HCCWY	800100	302	TAT	512	43172	1443	134.65	7930.86				P4378PLINCBLN	0329	60	CS
HCCWY316800100000	930703	HCCWY	800100	302	TAT	704	32493	1800	134.65	7923.49				P4378PLINCBLN	0329	60	CS
HCCWY316800100000	930703	HCCWY	800100	302	TAT	704	32624	1805	134.65	7927.12				P4378PLINCBLN	0329	60	CS
HCCWY316800100000	930703	HCCWY	800100	302	TAT	704	32490	1807	134.65	7925.15				P4378PLINCBLN	0329	60	CS
HCCWY316800100000	930703	HCCWY	800100	306	TAT	572	32623	1804	134.65	7921.21				P4344L TRADER	0329	60	CS
HCCWY316800100000	930703	HCCWY	800100	405	TAT	536	3900	1188	95.10	5394.64				P4378PLINCBLN	0429	60	CS
HCCWY317170000000	930701	HCCWY	800200	302	TAT	113	7346	6633	177.25	1682.21				P4343PLINCBLN	0329	11	PC
HCCWY317170000000	930701	HCCWY	800200	302	TAT	113	5642	6184	177.25	7223.57				P4343PLINCBLN	0329	11	PC
HCCWY317170000000	930701	HCCWY	800200	302	TAT	123	6150	6020	177.25	3109.07				P4343PLINCBLN	0329	11	PC
HCCWY317170000000	930701	HCCWY	800200	302	TAT	123	2645	6063	177.25	2429.60				P4343PLINCBLN	0329	11	PC
HCCWY317170000000	930701	HCCWY	800200	302	TAT	113	4822	6086	177.25	7473.80				P4343PLINCBLN	0329	11	PC
HCCWY317170000000	930701	HCCWY	800200	302	TAT	113	6970	6217	177.25	3013.53				P4343PLINCBLN	0329	11	PC
HCCWY317170000000	930701	HCCWY	800200	302	TAT	113	6940	6462	177.25	4250.54				P4343PLINCBLN	0329	11	PC
HCCWY317170000000	930701	HCCWY	800200	302	TAT	113	11200	6340	177.25	3576.54				P4343PLINCBLN	0329	11	PC
HCCWY317170000000	930701	HCCWY	800200	302	TAT	120	2948	6218	177.25	5480.40				P4343PLINCBLN	0329	11	PC
HCCWY317170000000	930701	HCCWY	800200	306	TAT	505	64380	1148	134.65	7922.14				P4344L TRADER	0329	60	CS
HCCWY317170000000	930701	HCCWY	800200	306	TAT	505	64380	1148	134.65	7922.14				P4344L TRADER	0329	60	CS
HCCWY318470000000	930703	HCCWY	800100	302	TAT	504	31300	1600	134.65	7907.23				P4378PLINCBLN	0329	60	CS
HCCWY318570000000	930703	HCCWY	800200	302	TAT		6680	6251	134.65	1514.94				P4378PLINCBLN	0329	60	CS
HCCWY318570000000	930703	HCCWY	800200	302	TAT	113	5620	6252	177.25	7637.42				P4378PLINCBLN	0329	11	PC
HCCWY318570000000	930703	HCCWY	800200	302	TAT	123	6947	6377	177.25	3730.71				P4378PLINCBLN	0329	11	PC
HCCWY318570000000	930703	HCCWY	800200	302	TAT	123	4322	6208	177.25	2341.12				P4378PLINCBLN	0329	11	PC
HCCWY318570000000	930703	HCCWY	800200	302	TAT	123	6970	6217	177.25	3688.54				P4378PLINCBLN	0329	11	PC
HCCWY318570000000	930703	HCCWY	800200	302	TAT	113	6648	6432	177.25	1122.84				P4378PLINCBLN	0329	11	PC
HCCWY318570000000	930703	HCCWY	800200	302	TAT	113	13915	6673	177.25	4206.20				P4378PLINCBLN	0329	11	PC
HCCWY318570000000	930703	HCCWY	800200	306	TAT	130	26496	3079	177.25	7964.72				P4344L TRADER	0329	11	PC

page 2

GRID K 10

MILITARY SEALIFT COMMAND

STATEMENT OF CARGO TRANSPORTATION CHARGES

2014082

PRODUCTION DATE 28/07/93

FISCAL YEAR 93

CUSTOMER CODE 00370 TITLE SPIC-8 (PROJECT PHOETHN)
2800 3D, 20TH ST.
PHILADELPHIA, PA 19101

DPS

F2014082

STATEMENT OF CARGO TRANSPORTATION CHARGES

PRODUCTION DATE 28/07/93

FISCAL YEAR 93

CUSTOMER CODE 00370 TITLE DPSC-0 (PROJECT PWDQSTN)
2800 SO. 20TH ST.
PHILADELPHIA, PA 19101

[illegible]

page 2

GRID - 10

MILITARY SEALIFT COMMAND

STATEMENT OF CARGO TRANSPORTATION CHARGES

2014062

PRODUCTION DATE 28/07/93

FISCAL YEAR 93

FLOWER CODE 00370 TITLE DPSC-6 (PROJECT PHOENIX)
2800 SA, 20TH ST.
MONTGOMERY AL 36101

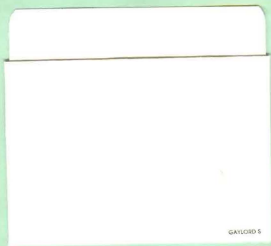
9099

INITIAL DISTRIBUTION LIST

	No. Copies
1. Defense Technical Information Center Cameron Station Alexandria, Virginia 22304-6145	2
2. Library, Code 052 Naval Postgraduate School Monterey, California 93943-5002	2
3. Defense Logistics Studies Information Exchange U.S. Army Logistics Management Center Fort Lee, Virginia 23801	1
4. Chief, Defense Subsistence Office, Alameda 900 Marina Bay Parkway Richmond, California 94804	1
5. Commander Defense Subsistence Region, Pacific 2155 Mariner Square Loop Alameda, California 94501-1022	1
6. LCDR James Kerber, SC, USN Naval Supply Center Comptroller Department (Code 50) Building 321-2 Oakland, California 94625	1
7. Professor Dan C. Boger Systems Management Department (Code SM AS/Bo) Naval Postgraduate School Monterey, California 93943-5002	1
8. Professor William Gates Systems Management Department (Code AS/Gt) Naval Postgraduate School Monterey, California 93943-5002	1
9. Don Bohensky Ocean Clearance Cargo Branch (Code MTWOP-TO-RG) Military Traffic Management Command Western Area Oakland Army Base Oakland, California 94626-5000	1

10. Jon Gunn 1
Ocean Clearance Cargo Branch (Code MTWOP-TO-C)
Military Traffic Management Command
Western Area
Oakland Army Base
Oakland, California 94626-5000
11. Hal Swanson 1
Cost Analysis Branch (Code MTWRM-B)
Military Traffic Management Command
Western Area
Oakland Army Base
Oakland, California 94626-5000
12. LtCol Stanley Perkins, USAF 1
United States Transportation Command
Logistics Readiness Branch (Code TCJ3/J4-LPR)
508 Scott Drive
Scott Air Force Base, Illinois 62225-5347
13. LCDR Gerard F. Brenner, SC, USN 1
7 Burnt Plains Road
Milford, Connecticut 06460

DUDLEY KNOX LIBRARY
NAVAL POSTGRADUATE SCHOOL
MONTEREY CA 93943-5101



GAYLORD S

DUDLEY KNOX LIBRARY



3 2768 00018811 4